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Iranians on #SocialMedia

By Holly Dagres

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ABOUT THE AUTHOR



HOLLY DAGRES is a nonresident senior fellow with the Atlantic Council's Middle East Programs. She is also the editor of the IranSource as well as MENASource blog and curator for the weekly newsletter, *The Iranist*. Before joining the Atlantic Council, Dagres

worked as a freelance Iran analyst, regularly following traditional and social media in English and Persian. She also worked as the assistant editor at the Cairo Review of Global Affairs, associated with the American University in Cairo's Global Affairs and Public Policy School. She regularly gives analysis for television, radio, and print, including BBC News, CNN, NBC News, and The New York Times. Her work on Iran has appeared in numerous publications, including Foreign Policy, Guardian, Huffington Post, TIME, and the Washington Post. Dagres received a master's degree in political science at the American University in Cairo, and a bachelor's degree in political science and French from the University of California, Los Angeles. Born in Los Angeles. Dagres spent her adolescent years in Iran, from 1999 to 2006, during which time she graduated from Tehran International School. She is fluent in Persian.

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Note:

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INTRODUCTION

hat's your problem?" a high-school student with platinum blonde hair sticking out of her headscarf barks to her teacher. The scene is from an Instagram satire video comparing Iranian youth of the 1980s—when students dressed much more conservatively and feared their teachers—to the present day.¹ So, why does this matter? This video is emblematic of how Iranian netizens are using information and communications technology (ICT), as well as the creativity with which they are pushing to expand economic, cultural, and political boundaries under the Islamic Republic of Iran.² While humor and satire have always been part of Iranian culture, the advent of the Digital Age—the use of social media and messaging apps specifically—has shaped Iranians' lives in ways the leadership of the Islamic Republic could never have predicted. This report will explore the social media habits of Iranians and how the clerical establishment is repressing the online space.

SOCIAL MEDIA NUMBERS AND USES

ran has a population of eighty-three million, making it the nineteenth most populous country globally, and the third most populous in the Middle East and North Africa (MENA) after Turkey and Egypt.³ With their country internationally isolated for four decades, Iranians have had to rely on satellite dishes, which are technically illegal but widely used, and the Internet, which is heavily censored, to connect with the world. Iranian Internet users are said to number 57.4 million, though some experts believe the number is even higher.⁴

According to a 2017 study from the government-funded Statistical Center of Iran (SCI), at least 73 percent of Iranian households have Internet access—80 percent of urban households have Internet, as do 57 percent of rural ones. Iranians use the Internet primarily to access social media (70.5 percent); download games, movies, and music (55 percent); and conduct online searches (36 percent).⁵ Because the SCI has not updated its study since 2017, Internet access is assumed to be even greater, especially as there has been an increase in Internet bandwidth, penetration, and speeds over the past few years as part of the National Information Network (NIN)—a domestic or "halal" Internet that is separate from the international Internet. (This will be discussed in more detail later.) 16 It's also noteworthy that mobile Internet is considered to have the most connections, with active mobile Internet subscribers per one hundred people at 105 percent in November 2021.7 That number was just 72.5 percent in February 2020.8 According to an August

2021 report by state-run Islamic Republic News Agency (IRNA), Iran's mobile phone penetration rate is more than 155 percent—partly because some Iranians own more than one cell phone. Additionally, the use of cell phones and mobile Internet has increased sharply in the past year and a half due to the pandemic.⁹

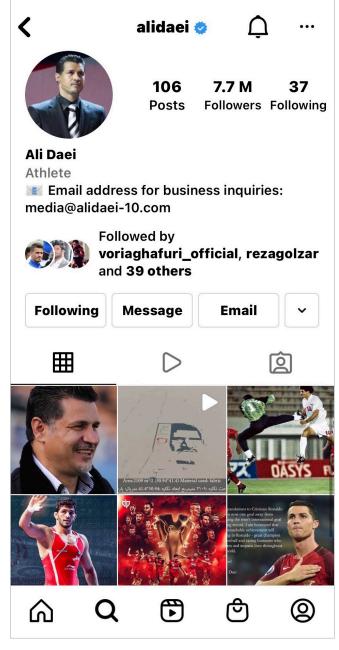
There are no clear statistics on the number of Iranian netizens. However, February 2021 polling data from the Iranian Students Polling Agency (ISPA) reported that 73.6 percent of Iranians over eighteen years of age use social media and messaging apps. Popular international social media platforms—such as Facebook, Twitter, and YouTube—are blocked, but Iranians have access to them via circumvention tools such as virtual private networks (VPNs) and proxy services. Of total users, 64.1 percent use WhatsApp, a messaging app; 45.3 percent use Instagram, a photo-sharing app; 36.3 percent use Telegram, a messaging app; 3.3 percent use Facebook, a social networking site; 2 percent use Twitter, a microblogging site; 0.3 percent use LinkedIn, a professional networking website; and 0.3 percent use TikTok, a video-sharing app.¹⁰

State-run Fars News Agency, which is closely tied to the Islamic Revolutionary Guard Corps (IRGC), in December 2020 reported some interesting numbers regarding Iranian social media and messaging apps use from the Beta Research Center (BRC)—without providing the report's details, including its methodology. The BRC, an Iranian organization that analyzes social media and big data, reports that Persian-language Telegram channels

February 2021 polling data from the Iranian Students Polling Agency (ISPA) reported that 73.6% of Iranians over eighteen years of age use social media and messaging apps. post five hundred million posts a year from forty-nine million Iranian users—despite a ban on the messaging app since 2018. The BRC also claims that more than forty-eight million Iranian Instagram users publish one billion content posts annually.¹¹ In addition, the BRC reports that there are fifty Persian-language Instagram accounts with more than three million followers, and more than six hundred accounts with more than one million followers. A quick search of prominent domestic figures in Iranian society—politics, arts and culture, and sports—seems to validate some of that information. For example, prominent actress Taraneh Alidoosti (@taraneh alidoosti) has seven million followers: musician Mohsen Chavoshi (@mohsenchavoshi) has 4 million followers: Supreme Leader Ayatollah Ali Khamenei (@khamenei ir) has 4.5 million; and football legend Ali Daei (@alidaei) has 7.7 million followers.¹²

The BRC also claims that two million Iranian Twitter users tweet about five hundred million tweets annually. with two hundred million retweets and 1.5 billion likes notable figures given that this social media platform is blocked.¹³ The information provided by the BRC has been guestioned by fact-checking website FactNameh, which highlights that the report cites domestic messaging apps like Soroush and Bale as having twelve and 7.5 million users, while some experts claim the numbers are much smaller.¹⁴ The BRC figures contrast starkly with Iranian app stores Cafe Bazaar and Myket, where Soroush and Bale have been downloaded a total of three million and 1.9 million times, respectively. In September 2021. the SCI reported that there was a 12 percent increase in the number of Iranians using social media over the past three years—65 percent of those are above the age of fifteen. According to the SCI, 68 percent of Iranians over fifteen use Instagram, and 88 percent use WhatsApp.¹⁶ The report also noted that forty-five million Iranians use Telegram and send fifteen billion messages on the app daily—despite it being blocked for the past four years.¹⁷ These figures profoundly contrast with the aforementioned BRC report.

Iranian netizens, like netizens elsewhere, use social media in a variety of ways, including for commerce, entertainment, and political and cultural pursuits. Many of the examples in this report are derived from Instagram, the most popular social media platform among Iranians and one that remains unblocked by the regime—for now.



Iranian football legend Ali Daei's official Instagram account.

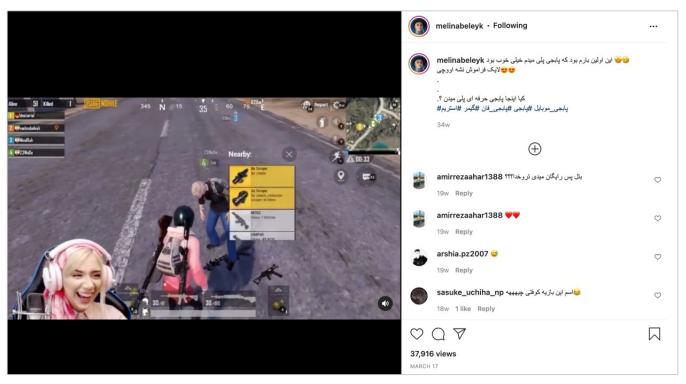
Photo credit: Instagram screenshot.

COMMERCIAL, CULTURAL, AND ENTERTAINMENT SOCIAL MEDIA

ranian Instagram influencers, just like those in the West, use their accounts for sponsorships, marketing products, and other advertisements. Food influencers such as Farhad Paz (@FarhadPaz), who has 1.6 million followers, try out restaurants that serve everything from quadruple-decker hamburgers with injectable cheese to a combined following of almost 3 million, post spoof vid-Iranian dishes like tahchin (chicken saffron rice cake). Paz has a YouTube channel with more than nineteen thousand subscribers, and one video has received more than three 5s to saffron brands. hundred and ninety-five thousand views, though much of his revenue and viewership come from Instagram.¹⁸ It's unclear how food influencers like Paz make an income. but if it's similar to Western content creators, some are online. Gaming is a popular pastime, whether on a perlikely offering Instagram posts in exchange for free meals at restaurants and/or charging for content.¹⁹ Another food influencer, Mahdis Food (@Mahdis Food), who has eight hundred and thirty-one thousand followers, posts personalized video advertisements—such as for

laser hair removal and hair extensions—between recipe videos for fried chicken and Iranian dishes like mirzeh ghasemi (grilled eggplant dip). Sometimes couples work together as content creators. Mohamaad and Fatemeh (@mohamaad vf and @1fatemeh arimandi), who have eos and personalized video advertisements for everything from video game stores that sell Sony PlayStation

Video-game streaming is also a means of generating income for Iranian influencers. With few extracurricular activities available. Iranian youth spend a lot of time sonal computer or cell phone, or at game centers, where youth can play by the hour on gaming consoles or computers. There are thirty-two million gamers in the country, according to a September 2020 report by the Iran Computer and Video Games Foundation.²⁰



Melina Beleyk livestreaming PlayerUnknown's Battlegrounds. Photo credit: Instagram screenshot.

There has reportedly been an increase in Persianlanguage gaming content on various social media platforms, such as Instagram, TikTok, and YouTube, in the past several years—even though some platforms are blocked. Iranian gamers have also taken to video-game livestreaming on Aparat (Iran's version of YouTube) and Amazon-owned Twitch, albeit via circumvention tools. Some Iranian gamers have managed to turn their gaming into lucrative careers. For example, Melina Beleyk (@melinabeleyk), who has more than ninety-three thousand followers on Instagram, is a gaming-video creator. Beleyk livestreams on Aparat and has more than one hundred and twenty-five thousand views and sixty-two thousand subscribers on her channel, where she livestreams gaming sessions for popular first-person-shooter video games such as Call of Duty, PlayerUnknown's Battlegrounds, and Zula.²¹ Beleyk receives donations through Reymit, an Iran-based online sponsorship service for content creators. Another gaming-content creator account is Digipubg (@digipubg), the username is a play on *PlayerUnknown's Battlegrounds'* acronym (PUBG), which has more than sixty-five thousand followers and is sponsored by Digikala (Iran's equivalent of Amazon). Some gamers are also able to turn streaming into a lucrative business via donations through Aparat. Interestingly, at least one Iranian gamer allegedly decided to pursue a professional gaming career abroad thanks to the generous donations of his viewers and followers—or so a Redditor claims.²²

There are countless Persian-language articles about generating revenue on Instagram. Each influencer appears to set their own rate, though Tehran-based social media agency Neshanet speculated that they can make up to 6 billion rials (nearly \$20,000).²³ Instagram video creator Mehrdad Habibi (@realmehrdad), who has four hundred and seventy-two thousand followers, said in 2019: "On average, every 100,000 followers earns about 5[0] to 6[0] million [rials] (\$164 to \$197) per month for the account holder."24 Content creator Tina Entezari, known for her thickly tattooed eyebrows and injected lips. has two accounts (@tina entezari1 and @tinaa.entezar), totaling four hundred and twenty-six thousand followers. Entezari has disclosed that she charges for various services: 5.5 million rials (\$18) for a video clip on both her pages; 2.5 million rials (\$8) for a happy-birthday post; and 3 million rials (\$10) for an Instagram story. For 10 million rials (\$32), Entezari offers three posts on each of her pages and a story every twenty-four hours over the course of a week.²⁵

In September 2020, the Young Journalists Club (YJC) news agency interviewed an unnamed Iranian

There are countless Persian-language articles about generating revenue on Instagram. Each influencer appears to set their own rate, though Tehran-based social media agency Neshanet speculated that they can make up to 6 billion rials (nearly \$22,000).

advertisement agency that works closely with celebrities and influencers. According to the ad agency, actors Shabnam Gholikhani (@shabnamgholikhani) and Pouria Poursorkh (@pouriapoursorkh), who have 1.3 and 3.1 million followers, respectively, are the highest-paid Iranian celebrities on Instagram for advertisements.²⁶ YJC reported that they make 300 million rials (\$984) per Instagram post and roughly 50 million rials (\$164) for an Instagram story.²⁷ The report also included top-grossing content creators such as Mohammad Amin Karimpor (@mohamadaminkarimpor) and Mohsen Easy (@iz.mohsen), who have 4.7 million and 3.6 million followers, respectively. Karimpor, who is known for sports video parodies and sometimes appears in television commercials, reportedly has a monthly income between 2 and 3 billion rials (roughly \$6,583 and \$9,740), while Easy, who is known for dubbing and sports video parodies, reportedly has a monthly income between 1.5 and 2.5 billion rials (\$4,937 and \$8,229).²⁸ The numbers are particularly impressive given the dire situation of the Iranian economy,

with historically high inflation and a national currency that has lost 80 percent of its worth since 2018.²⁹ To put these Instagram influencers' incomes into perspective, the average declared annual income is 764,746,000 rials (\$2,517) for an urban household, and 420,470,000 rials (\$1,384) for a rural household for the 1399 Iranian calendar year (March 2020–March 2021), according to government-funded SCI—which means the real figures might be different.³⁰

While some Iranians use Instagram as paid advertisement space, others use it as free promotional space for services including dentistry, beauty salons, and underground tattoo parlors. Iran's first female car detailer, Maryam Roohani (@missdetailer), who has more than fifty-six thousand followers, uses her account to highlight her detailing of luxury vehicles like BMWs and Maseratis, with rap and reggaetón music playing in the background. Clothing, jewelry, and home-goods vendors post their designs and products, and provide contact information

in their bios or ask for direct messages only. Choobrakht (@choob_rakht), which has one hundred and sixty-three thousand followers, posts Boho-style outfits that can be ordered via WhatsApp. Another popular clothing page is ibolak (@ibolak), which has 1.4 million followers, while headscarf vendor Monaco Scarf (@monaco_scarf), which has one hundred and sixty thousand followers, uses its Instagram page for ad space and sells clothing via its website. Then there are musicians like Helal Gheshm (@ helalqeshm), who has one hundred and five thousand followers, who use Instagram to promote their music. Gheshm often posts videos of himself playing the oud and singing in various locations on his home island of Qeshm in the Persian Gulf.³²

Many restaurants and cafes also rely on Instagram. For example, Vitrine Kitchen (@VitrineKitchen), which has more than ninety-five thousand followers, posts photos of its pizza and cheesecakes from its Tehran restaurant. Interestingly, many restaurants don't have websites, and



A parody video ad for Mahmood Jewelry by Mohsen Eazy (logo seen in bottom right). Photo credit: Instagram screenshot



Farzane Pannahi gives a dalgona candy tutorial on her Instagram account. Photo credit: Instagram screenshot.

rely on Instagram direct messages for reservations. This is not only because Instagram is free, but Iranians, out of habit, search on the app for restaurants and rely on food influencers for recommendations. The Tehran National Food Industry School (@Melli Tehran), which has more than fifty-four thousand followers, uses Instagram to advertise culinary classes, from making pastries to artsy watermelon carvings. Chef Mousavi (@mosavi pastrychef), who has more than thirty-six thousand followers, uses Instagram for dessert tutorials, while Farzane Pannahi (@farzane.pannahi), who has two hundred and forty-five thousand followers, is a mother who gives "general tips and cooking lessons," including how to make dalgona candy featured in the K-drama series Squid Game. Then there are food companies like Maya Kando (@mayakando), which has more than ninety-eight thousand followers and promotes "the best honey in Iran." 33

Due to the coronavirus pandemic, Iranians have been using social media even more readily, and, as a result, businesses have also multiplied online. More than 80 percent of online purchases in Iran are on messaging and social media apps, especially Telegram and Instagram.³⁴ Instagram has replaced Telegram due to the ban on the latter, and wider recognition of Instagram's potential. In 2018, Babak and his wife Ellie started Elit Kala (@Elit_Kala), an Instagram kitchenware page with more than

Instagram gives
Iranian women,
who sometimes
cannot work outside
the home due to
traditions or family
obligations, the
opportunity to
start a business
from home.



"Biden Sings Trump Dances Cat Vibes (Ievan Polkka) Deepfake" video by Ryan the Gray (YouTube username: RyanBigNose). Photo credit: YouTube screenshot.

sixty-four thousand followers. The Mashhad-based couple travel to Tehran, where they purchase kitchenware to sell online. Babak said in October 2019, "We can't imagine having a job at a company and getting paid less than a third of what we make today. I had a job at a pharmacy, but I don't work there anymore for that reason." 35

It's important to mention that Instagram businesses also empower Iranian women. For example, Tehran-based businesswoman Aida Pooryanasab works with single mothers and homemakers, often from working classes. Instagram gives Iranian women, who sometimes cannot work outside the home due to traditions or family obligations, the opportunity to start a business from home.

"These women are not only earning money—they also feel like they are existing," explains Pooryanasab. "Instagrambased businesses let these women feel good about their economic independence." As stated in a September 2021 report by the SCI, 83 percent of online businesses—in addition to providing their goods and services on a website—also use Instagram, Telegram, and WhatsApp for sales. The report noted that eleven million Iranian jobs depend on social media networks like Instagram.

Some Iranians use social media purely or initially to produce entertaining content—perhaps with the long-term goal of monetizing their account. For example, Kokab Akhtari (@Kokab_Akhtari) is a chador-clad

content creator with more than twenty-one thousand followers. She posts humorous takes on popular Western and Iranian songs, such as moonwalking across her living room to "Billy Jean" by Michael Jackson or a humorous rendition of "Tehran Tokyo" by diaspora pop singer Sasy Mankan.³⁸ Video creator Ryan the Gray (@ryan the gray), who has one hundred and three thousand followers, posts memes and deep fakes, related to Game of Thrones—as evidenced by his username—as well as Iranian and US politics, such as former President Hassan Rouhani "meeting" his US counterpart Joe Biden. Ryan is responsible for the viral "Cat Vibing to levan Polkka" post-2020 US presidential election video featuring Biden and Donald Trump, which accumulated ten million views on YouTube. There are tons of content of Iranians posting comedic takes on Iranian social issues—family, school, and marriage—such as self-described actress and comedian Mary Hm (@mary hm), who has 2.4 million followers. Saeed Shahba (@saeedshahba), who has one hundred and thirty-six thousand followers, dubs Hollywood movies, football stars, and Iranian politicians, including Rouhani meeting with his successor, Ebrahim Raisi.³⁹

Iranian shepherd Mohammad has an Instagram account named after his late dogs, Salar and Polad (@salarpolad), with more than thirty-two thousand followers. The posts capture his village life in northeastern Iran. Mohammad was allegedly gifted his cell phone by his brother, who bought it for him with his first paycheck after starting a new job once he had completed

his PhD in Tehran.⁴⁰ Dour Nist (@dour nist), which has more than eighty-three thousand followers, uses its Instagram account to publish short documentaries about Iranian heritage. As its bio reads, "Iran with all its beauties is 'never far away'"—a play on its account name. Pesar Ame (@pesarame), which has more than nineteen thousand followers, reposts nostalgic clips of a puppet with the same name from the Kolah Ghermezi series that has been on state television for almost three decades. Others use social media to showcase their art, animations, and designs. Ani-mation Studio (@ani_mationstudio) has six hundred and forty thousand followers and produces black-and-white stick-figure cartoons. Lately, its videos include advertisements for a digital-currency news website and a credit-card company. Social media are also places for fan pages of singers and bands—be they Iranian, Western, or Korean, like K-pop band BTS—and for popular sitcoms such as the adult animated show Rick

There are also health and wellness accounts like End the Stigma (@end_the_stigma), which has more than forty-eight thousand followers and focuses on mental health. Its bio reads in Persian: "Mental disorders are painful enough for patients, we should not make the situation more difficult for them by stigmatizing them. Let's talk about mental disorders." Bahareh Ghafari (@ghafaridiet), who has 2.5 million followers, is a nutritionist who posts about health and nutrition with permission of the Ministry of Health, according to her bio. 42

SOCIOPOLITICAL SOCIAL MEDIA

ocial media "is also 'accountability technology,' in that it provides efficient and powerful tools for transparency and monitoring" of the government, says scholar and democracy expert Larry Diamond. Cell phones and social media "create new possibilities for exposing and challenging abuses of power." Social media played a prominent role in amplifying footage taken by Iranian citizen journalists of bloody crackdowns by security forces after the 2009 post-election protests known as the Green Movement. Countless videos of demonstrations across various cities were uploaded to YouTube and amplified on Facebook and Twitter, including the killing of Neda Agha Soltan, whose image became the de facto face of the movement.

Similar footage was uploaded and shared on messaging apps and social media during nationwide December 2017–January 2018 protests in which security forces killed at least twenty-one and arrested four thousand and nine hundred; November 2019 protests in which security forces arrested and killed thousands; and many smaller-scale demonstrations, such as a 2018 trucker strike and, more recently, July 2021 protests sparked by water shortages in southwestern Khuzestan Province, in which at least eleven protesters and bystanders were killed and at least three hundred were arrested; and the November 2021 Isfahan farmers protests, in which three hundred were arrested.⁴⁵

Recognizing that Iranian citizen journalists can document rights abuses, and that social media and messaging apps can quickly mobilize masses of people, authorities have, over the years, resorted to blocking access to websites and now also resort to Internet throttling—slowing the Internet to a snail-like pace—to defeat circumvention tools. However, authorities took Internet censorship to another level when they shut down the Internet for a week—with varying levels of mass disconnections lasting one to two weeks—during the November 2019 protests (Internet shutdowns will be discussed later). As Amnesty International's 2020 report, "A Web of Impunity: The Killings Iran's Internet Shutdown Hid," revealed, "authorities deliberately blocked Internet access inside Iran, hiding the true extent of the horrendous human rights violations that they were carrying out across the country."46 It wasn't until the Internet was back online that Iranians were able to post footage of atrocities committed by security forces, giving rights organizations and the international community the capability to document unlawful killings and abuses.

Videos posted in the aftermath of the November 2019 protests were sometimes extremely bold. A first-person Instagram video of twenty-seven-year-old Pouya Bakhtiari went viral post-mortem. The self-described "vegetarian electronic engineer" spoke of his hopes for his country, including an end to the "criminal and

corrupt [Iranian] regime." Hours after the video was taken, Bakhtiari was killed by security forces. ⁴⁷ Because of his video, Bakhtiari became one of the faces of the protests. ⁴⁸ A year later, an Instagram account known as 1500 Tasvir (@1500tasvir), which now has more than eighty-three thousand followers, was started to highlight the stories of the reportedly fifteen hundred killed—as demonstrated by its name "images of 1,500"—and amplify the voices of the families of the victims. Additionally, 1500 Tasvir, which has a Twitter account (@1500tasvir) with more than twenty-nine thousand followers, uses its platform to draw attention to other rights abuses and injustices, such as the wrongful execution of wrestler Navid Afkari in September 2020. ⁴⁹

As with the November 2019 protests, social media have been helpful for human-rights organizations documenting other rights abuses. For example, in June 2019, the head of the US-based Iran Human Rights Documentation Center (IHRDC) saw a tweet about a directive by Iran's Social Welfare Organization banning religious minorities from employment at kindergartens. "I contacted the person who had posted the tweet and asked if they could provide me with a copy of the document. They did provide it to me," executive director Shahin Milani said. "After reviewing it and realizing that it was authentic, we published a story about the directive on our website and posted it to our social media accounts." Persian-language

media outlets picked up the story and, within days, the organization partially rescinded the directive.⁵⁰

Social media have also become essential tools for amplifying Iranian women who publicly protest compulsory hijab. Videos including violence by authorities and citizens arrests are shared by My Stealthy Freedom (MSF), run by New York-based activist and journalist Masih Alinejad.⁵¹ The Facebook page, which started in 2014, now has one million likes, while Alinejad uses her Instagram and Twitter accounts (@AlinejadMasih), which total 6.3 million followers, to amplify MSF posts, interviews, and testimonies of relatives of those killed by the Islamic Republic. 52 This also includes videos of Iranian women removing white headscarves to protest compul--sory hijab #چهار شنبه های سفید#WhiteWednesdays). A sepa rate hashtag not affiliated with Alinejad, پدختران خیابان انقلاب (#GirlsOfRevolutionStreet), refers to women who removed their headscarves while standing on an electricity box on Tehran's Enghelab (Revolution) Street. When protester Vida Movahed was arrested in December Where is the") #دختر خیابان انقلاب کجاست 2017, the hashtags girl of Revolution Street") and #Where_Is_She also went viral, asking the whereabouts of Movahed, whom authorities had detained.53

In August 2020, dozens of women took to social media to tell their stories of sexual harassment and assault. The #MeToo movement in Iran was prompted

Recognizing that Iranian citizen journalists can document rights abuses, and that social media and messaging apps can quickly mobilize masses of people, authorities have, over the years, resorted to blocking access to websites and now also resort to Internet throttling—slowing the Internet to a snail-like pace—to defeat circumvention tools.



Mothers of slain November 2019 protesters gather at a grave site with photos of their late sons. Post by 1500tasvir reads: "Mothers of Aban" (Aban is the Iranian calendar month in which the November 2019 protests took place).

Photo credit: Instagram screenshot.



"You didn't give us water and you've taken our eyes too." #WhereAreMyEyes #IranWillBecomeIsfahan #IsfahanIsNotAlone Photo credit: Twitter screenshot

by a video of women journalists who had shared their experiences of harassment by powerful men they had interviewed and their colleagues, so that "others do not remain silent in the face of harassment."54 More than one hundred men faced allegations, including internationally renowned artist Aydin Aghdashloo. Sussan Tahmasebi, an Iranian women's-rights activist and director of FEMENA, said that social media played a "critical role" by "providing anonymity and, in turn, relative safety in a conservative society for those who wanted to speak about their experiences with sexual violence and rape."55 She adds tion, however, that since Raisi took office in August 2021, that "social media was also a powerful tool in the hands of the women's movement which stepped up to respond to the development by publishing accounts, providing much needed informational material, and guiding discussions to ensure substance and greater awareness."56 As the New York Times pointed out at the time, the movement was "groundbreaking" in a conservative society "where discussing sex is culturally prohibited, sex outside marriage

is illegal, and the burden of proof for victims of sexual crimes is onerous."57

Viral hashtags have also been used to draw attention to issues such as capital punishment. In July 2020, Iranians of all walks of life took to social media using "Don't Execute") to stop the execution of three voung protesters who took part in the November 2019 protests.⁵⁸ There were more than 4.5 million tweets, and tens of thousands of posts on Instagram and Telegram, with the Persian hashtag—enough for Iranian officials to take note and temporarily halt the executions.⁵⁹

While the "Don't Execute" campaign was successful, the same tactics failed to stop the September 2020 execution of Navid Afkari, a wrestler wrongfully accused of killing a security guard during a protest. 60 In March 2021, an antigovernment campaign was launched on social media using #No2IslamicRepublic in English and Persian الله به جمهوری اسلامی). The movement was announced via a statement signed by six hundred and forty Iranians inside and outside Iran. Once the campaign kicked off, there were numerous solidarity posts on social media from figures such as the father of slain protester Pouya Bakhtiari, who published a video declaring his opposition to the Islamic Republic from inside Iran. Many anonymous videos and photos were taken from inside the country, as evident by the locations, with the phrase "No to Islamic Republic" written on hands or a piece of paper. 61

In August 2021, as the fifth wave of the coronavirus ravaged Iran due to the fast-spreading Delta variant. Iranians used #SOSIran to draw international attention to the supreme leader's ban on Western vaccines. 62 Using the hashtag, Iranian singer Aidin Tayassoli posted on his Instagram account, which has one hundred and fifteen thousand followers (@aidin tavassoli), his cover of Michael Jackson's "They Don't Care About Us" with Persian subtitles and photos of Iran during the pandemic superimposed on his t-shirt.⁶³ The hashtag might have had an impact because, after about a week, the government appeared to reverse its decision on Western vaccines, with the caveat that it must not purchase doses produced in the United States. 64 It is important to menvaccine use has suddenly accelerated to unprecedented numbers, also demonstrating how political infighting partly delayed the vaccine rollout campaign, as doses had been purchased months before the June 2021 presidential election 65

In November 2021, for more than two weeks, farmers gathered in central Isfahan Province to protest water shortages due to drought exacerbated by poor environmental planning and water mismanagement. The protests had



Deep fake of former hardline President Mahmoud Ahmadinejad as American rapper Nicki Minaj. Photo credit: Instagram screenshot.

dried-up river bed of the Zayaneh Roud River, the lifeline of the historic city. By November 25, 2021, security forces had violently crackdown on protesters. 66 According to a December 2021 report by Iran Human Rights, more than 300 people were arrested with at least 40 protesters having become blind in their left or right eye after being shot by security forces.⁶⁷ To show solidarity with the blinded protesters, Iranians of all ages began posting photos on social media of covering their eve with their hand and "Isfahan is not alone") #اصفهان_تنها_نيست (See graphic on page 13)). Among those who participated were the mothers of the slain protesters from November 2019.68

Social media are also used to criticize the families of Iranian elites, particularly the children of government officials with connections, known as aghazadehs. For instance, a photo of the founder of the Islamic Republic's great-granddaughter went viral after she was pictured with a Dolce & Gabbana handbag that costs more than \$3.700.69 Similarly, the great-grandson of the founder of the Islamic Republic, Ahmad Khomeini, who regularly posts photos of himself wearing Western brands such as Tommy Hilfiger and Nike, has a following of nine hundred and ten thousand on his Instagram account (@ahmadkhomeini). In 2019, a post of Khomeini wearing Nike with

their largest gathering on November 19, 2021 in the his now-wife in a riding helmet went viral. Many Iranians online criticized his "luxurious" lifestyle, especially his wife's "luxury horse-riding hobby." 70 In 2018, an Instagram post of the "glamorous" wedding of the son of the Iranian ambassador to Denmark and model and fashion designer Anashid Hoseini (@anashidhoseini), who has 1.1 million followers, brought much criticism at a time when twelve million Iranians couldn't afford to get married.71 Photos of the aghazadehs living abroad, including in the United States, are often circulated online to highlight the hypocrisy of the clerical establishment. The images are usually of the sons and daughters partying—often with alcohol wearing revealing and often times designer clothes and driving luxurious cars like Porsches and Maseratis.⁷²

Iranians have also used social media for political humor and satire. In May 2018, when authorities banned the popular messaging app Telegram, there was a governmental push to have Iranians use the domestic version known as Soroush. Iranian content creators quickly resorted to humor. A parody video that went viral in Iran featured "a couple chatting on Soroush and exchanging selfies, only for an intelligence officer to edit the chats and insert his own selfie in lieu of the girlfriend's."73 Similarly, when rumors circulated in August 2020 that former hardline president Mahmoud Ahmadinejad might run in the 2021 presidential election, Iranians began to produce

deep fakes of him as rapper Nicki Minaj and "Mother of Dragons" Daenerys Targarven, Iranian social media users also took part in the 2020 US presidential election by posting cartoons and memes. Like Americans, Iranian netizens took a particular interest in the slow ballot counting in the state of Nevada, using memes like the Disney computer-animated Zootopia department of motor vehicles (DMV) sloths and even an Iranian drum recital with a fast and slow rhythm—a popular meme in



"Wherever you live in Iran and the world, you can announce your decision to abstain from voting in the 2021 presidential election. #I_Won't_Vote" Hand reads: "#I_Won't_Vote campaign." Photo is clearly taken in Iran due to car make and street layout. Photo credit: Twitter screenshot.

the Persian-language social media sphere repurposed for an array of topics.74

In June 2021, the Iranian presidential election was an important topic for Persian-language social media. Two #رای بی رای:hashtags trended online before the June 18 vote "No way I'm voting") and ا") #رای نمیدهم)—the latter created by prominent exiled activist Mahdieh Golroo—with some Iranians even posting photos of the slogan written on their hands. Many memes were posted on social media related to the election, including a scene from Sasha Baron Cohen's *The Dictator* of a hundred-meter race—in which Cohen's character shoots his competition—to demonstrate how the presidential election was a one-horse race. 75 Interestingly, one social media topic caught the attention of the supreme leader. Some state media outlets reported that the former speaker of parliament, Ali Larijani, was disqualified because his daughter, Fatemeh Larijani, lives in the United States, and numerous photos were posted online to substantiate the claim.⁷⁶ This allegedly became grounds for his disqualification by the Guardian Council, a powerful vetting body, on May 25, 2021. The uproar online about Larijani's daughter was such a big controversy that Khamenei referred to how "some candidates were wronged" during the vetting process and "accused of untrue things that were unfortunately spread throughout the Internet too"—an indirect reference to Larijani.77

Most high-ranking Iranian officials have social media accounts typically on Instagram, but often on Twitter or both—despite the ban on the latter. Former President Ahmadinejad—under whose administration Facebook, Twitter, and YouTube were blocked—regularly tweets (@Ahmadinejad1956) political commentary in English to his more than one hundred and thirty-nine thousand followers, sometimes random remarks like wishing the late rapper Tupac Shakur a happy birthday.78 Sadegh Zibakalam, a professor of political science at Tehran University and well-known political analyst, has two hundred and ninety-four thousand followers on his Twitter account (@sadeghZibakalam) and 1.1 million followers on his Instagram account (@zibakalamsadegh). He shares his views on a range of issues, including the Raisi government's handling of the Iranian nuclear file.79 Zibakalam also makes regular appearances on Clubhouse, which he advertises on his Instagram account. Not surprisingly, all seven qualified candidates in the June 2021 presidential election had Twitter accounts.80

According to activist Samaneh Savadi, "Iranians get access to information [on social media] that wouldn't be allowed on national TV or newspapers."81 It is notable that the latest ISPA report from September 2021 shows 41.4



Khiahan Tribune Instagram post. Graffiti reads: "Women of Afghanistan and Iran united against the barbarism of the Taliban and clerics."

Photo credit:

Instagram screenshot

percent of Iranians use social media and online media outlets as their main sources of news.82 Savadi adds. "There is a big number of activists running campaigns has more than ten thousand followers, uses its Instagram on Instagram. It's not just about photos."83 They include Bahareh Hedayat (@bhr.hedayat), a students and women's-rights activist with more than eight thousand five has almost fourteen thousand followers, posts politihundred followers; Hossein Ronaghi (@hosseinronaghi), cal graffiti seen on the streets of Iran, typically related a blogger and free-speech activist with more than for- to the news cycle, such as the July 2021 protests in ty-one thousand followers; Nargess Mousavi (@nargesmousavii), the daughter of the Green Movement lead- of Afghanistan. ers under house arrest since 2011 with one hundred and thirty-two thousand followers; and Sepide Qoliyan (@ sepide golivan), a journalist and women's- and laborrights activist with almost forty-three thousand followers. There are also anonymous accounts highlighting social and political issues—sometimes with wit—like Afshoon (@Afshoon), who has six hundred and sixty-two thousand followers on Instagram, Iranians send Afshoon videos, directly addressing her by name as they describe a motorcycle theft from a hospital by a man in a hospital gown, or the tearing down of a fanmade 2021 presidential election poster of then-Foreign Minister Mohammad Javad Zarif.84 Other videos highlight outrageous comments made by Iranian officials, or cifically points to the November 2019 protests, and how socioeconomic ills like poverty, by showing a teenager sleeping on the streets of a provincial town. Afshoon has a sense of humor, evidenced by her video choices, such as one of an Iranian woman partaking in the Cardi B "WAP" dance challenge. Afshoon writes of the video, not making international headlines the way the murder "Was this the dream of the Imam," referring to the Islamic of [Saudi dissident journalist] Jamal Khashoggi had done Republic's founder, Ayatollah Ruhollah Khomeini.85

ported issues, such as the estimated twenty million same time."87 anti-personnel landmines on the Iran-Iraq border during

the 1980-1988 war that continue to take lives. Iran Without Landmines (@iranwithoutlandmines), which account to educate Iranians about landmines and demining efforts. Khiaban Tribute (@khiabantribune), which Khuzestan Province or the August 2021 Taliban takeover

IHRDC's executive director sees social media as a tool of change for Iranians that has "changed the landscape tremendously." Milani explains: "Grave human rights abuses that took place in secrecy in the past will be exposed within days or even hours now. It is inconceivable that executions in the scale of the 1988 massacre remains secret if they take place now," referring to the 1988 prison massacre of political prisoners, in which an estimated 4.500-5.000 men and women, and possibly more, were mass executed over a period of three months.86 He observes, however, that the constant breaking-news cycle and overflow of information online have also shortened the public's attention span. Milani spethere was a lack of "adequate international attention." and that Iranian officials were not held accountable for the killings. "As a result, while many Iranians saw what happened across the country, they also noticed that their plight was just a year prior," Milani says. "One could say that social Instagram is also used to highlight other underre- media has been empowering and disempowering at the

OTHER APPS MAKING WAVES

DUBSMASH



Video-dubbing app Dubsmash is popular in Iran, with more than fifty thousand downloads on Cafe Bazaar and four hundred thousand downloads on Myket.⁸⁸ Iranians have used Dubsmash in various ways, including making humorous videos of lip-sync-

ing politicians' speeches and Friday prayer sermons. In March 2021, Iranian youth used Dubsmash to lip-sync California-based singer Sasy Mankan's hit, "Tehran Tokyo," which featured adult-film actress Alexis Texas in its music video. Texas' cameo caused so much controversy inside Iran that authorities threatened to sue Mankan in international court. As part of the viral nature of the song, Mankan called on his fans to submit videos for the Somayeh Challenge, reenacting or lip-syncing a part of the song. Within days of the song dropping, countless videos were posted on social media, mostly using Dubsmash. This prompted authorities to threaten that they would prosecute anyone posting Dubsmash videos.⁸⁹

TIKTOK



Surprisingly, Chinese-owned TikTok is filtered in Iran despite a twenty-five-year "strategic accord" between Beijing and Tehran.⁹⁰ Iranians have access to the Google Play Store, but some apps are blocked by Iran, and Google bans access to other apps

and services due to US sanctions. Additionally, Iranian app stores like Cafe Bazaar won't allow TikTok, so users have to rely on other means to get access. Mahyar, an Iran-based journalist, explained, "TikTok doesn't work if vou have an Iranian SIM card in vour device. As soon as you remove the SIM, the app works like a charm. This has made some users speculate that Iran-based users have been banned as per an agreement between Islamic Republic and the Chinese social media platform."91 TikTok reportedly has not commented on the issue despite questions from human-rights activists and journalists. For that reason, there are few statistics on Iranian TikTok users with the exception of the aforementioned ISPA report though Mahyar believes the number is in the thousands.92 A simple hashtag search with words like #("Iran") reveals spoof videos, viral dance challenges, and sometimes scenes from a holy shrine. Some of the videos are copied onto video-sharing websites like YouTube and Aparat, and even Instagram.

Surprisingly, Chinese-owned TikTok is filtered in Iran despite a twenty-five-year "strategic accord" between Beijing and Tehran.

CLUBHOUSE



In early March 2021, the audio-only app Clubhouse surged in popularity among Iranians, though the number of users is unknown. At the time, Clubhouse was invite only and solely for iPhone users. An Iranian developer designed a workaround called

ClubHouz, an unofficial version for Android users, which has been downloaded more than one hundred thousand times on Cafe Bazaar and forty-three thousand times on Myket.93 In early May 2021, Amir Rashidi, director of digital rights and security at Miaan Group, a rights organization focused on Internet freedom in MENA, said that while the number of downloads was increasing daily. "many Iranians simply do not trust that version and are waiting for an official version."94 This was likely due to security concerns. On May 21, 2021, Clubhouse announced the release of an Android version of its app. 95 The majority of Iranians use Android phones, resulting in a massive increase in Iranian users on Clubhouse, as Mahsa Alimardani, an Iran researcher at the freedom of expression organization ARTICLE19, explained: "I know myself and many friends have seen a shift in followers from Iran since the Android version was introduced."96

Even before the Android version was released, Iranians inside and outside Iran were counting down the Iranian new year on March 20, 2021, discussing the June 18, 2021 election, debating the twenty-five-year strategic accord with China, and sharing personal stories about depression and first loves. By early April 2021, rumored presidential candidates and high-ranking officials—such as then-Foreign Minister Zarif and then-nuclear chief Ali Akbar Salehi—had made appearances on Clubhouse. Some analysts believe that the clerical establishment was using Clubhouse to give the illusion of free debate inside the country ahead of the 2021 presidential election.⁹⁷

Nevertheless, there are issues with challenging officials. For example, Iranian journalist Omid Memarian, now with Democracy with the Arab World Now (DAWN), asked a presidential candidate about the killing of protesters during the November 2019 protests. He was quickly cut off for asking the question. In other instances officials only allow "vetted" journalists and experts to ask

questions, excluding dissidents and journalists working for Western-based Persian-language media outlets such as BBC Persian and Iran International. There have also been instances in which participants are only allowed to join the discussion and pose a question depending on whether someone is Western-dressed or wearing the hijab. For example, when Alimardani raised her hand repeatedly and was ignored in a room with conservative politicians, she changed her profile picture to a chadorclad woman and was instantly allowed to speak. 99

There are exceptions. When Faezeh Hashemi—the firebrand daughter of the late former President Ali Akbar Hashemi Rafsanjani-participated in a Clubhouse room for more than six hours on April 13, 2021, she took guestions from everyone and repeatedly called on the moderators not to censor voices.¹⁰⁰ Hashemi has frequently appeared on the app since, and even once declared that she believes Clubhouse has the potential to start a "national reconciliation dialogue" between groups inside and outside Iran-including opposition groups-though she didn't elaborate. 101 As Rashidi noted, "[Iranians] never ever had a chance to talk to Iranian officials at 2 am in the morning such as MPs or governmental officials, and criticize their work even if you are not happy and satisfied with their answers." Rashidi believes that "Clubhouse is creating its own culture."102

While the audio-only app has much potential, Alimardani clarified that Clubhouse "also has a lot of potential to be co-opted by state forces, or to be manipulated—through many of the app's security failures—to further endanger or persecute Iranians for exercising their freedom of expression, a right with many limits within Iranian laws and the public sphere." ¹⁰³ In July 2021, Clubhouse became no longer invite only. ¹⁰⁴ Interestingly, Clubhouse has been blocked since April 2021, though there has been no official government acknowledgment. Still, Iranians continue to use the audio-only app on a daily basis to discuss topics like protests and the nuclear talks in Vienna although, anecdotally, numbers appear to have dwindled after the presidential election in June 2021.

HOW THE GOVERNMENT IS FIGHTING BACK

reedom House categorizes Iran as "not free" on its Global Freedom Score (16 out of 100) and Internet Freedom Score (16 out of 100)—the lowest rank among MENA countries. 105 Since the 2009 Green Movement, the Islamic Republic views social media as a national security threat. "This seminal event realigned much of Iran's national security forces and resources towards internet governments, policies, and laws," wrote ARTICLE19 in its groundbreaking report, "Iran: Tightening the Net 2020 after Blood and Shutdowns."106 Of note was the establishment of the cyber police (FATA) in 2010 to police the Internet, and the Supreme Council of Cyberspace (SCC), a top Internet-policymaking body created by the supreme leader in 2012.107

As a result, Iranian authorities have widespread control over 57.4 million Internet users.¹⁰⁸ Not only have authorities blocked 35 percent of the world's most-visited websites—including Facebook. Twitter, and YouTube but they have also developed a Chinese-style "great firewall" of censorship. 109 It is worth mentioning that while the Green Movement was a pivotal event in online censorship, as early as 2006–2007, authorities blocked the Google-owned social networking website Orkut—which Iranian users dominated—and MySpace. As academic Niki Akhavan reveals, the blocking of these two websites is telling of the Iranian government's "awareness of social media's rising popularity and potential for challenging the state" at the time. 110

Numerous messaging and social media apps have come and gone over the years, including messaging app Viber, which was blocked by authorities in May 2014.¹¹¹ By 2016, the two most popular apps were Instagram and Telegram. Moderate political candidates used both to attract votes in the 2016 parliamentary and 2017 presidential elections. They were deemed threatening enough for authorities to arrest twelve administrators of reformist-leaning Telegram channels just before the 2017 election.¹¹²

Almost a decade after the Green Movement, in April 2018, authorities banned Telegram to "protect national security."113 The move was prompted by December 2017-January 2018 protests, in which Iranians in more than eighty provincial towns and cities took to the streets in what became one of the most widespread protests since the 1979 revolution. Authorities believed the popular messaging app,

which reportedly had forty million users right before the ban, incited people to protest.¹¹⁴ They cited the website and Telegram channel known as Amad News, which had 1.4 million subscribers and was run by France-based dissident journalist Ruhollah Zam, who used his account to expose the corruption of the clerical establishment and publish insider information due to family connections (his father was a prominent reformist cleric). Authorities alleged that Amad News helped coordinate protests, and even that it circulated a manual for Molotov cocktails.¹¹⁵

In 2019, the intelligence arm of the IRGC lured and kidnapped Zam from Iraq and shut down his Telegram channel. Zam was forced to confess under torture to a long list of allegations and was sentenced to death. He was executed on December 12, 2020.¹¹⁶

To counter Telegram, Iran released its domestic version known as Soroush (and later other apps. including: Bale, Gap, iGap, and Rubika). The move prompted many privacy and security concerns, with some Iranians resorting to humor to highlight the Big Brother aspect of such apps.¹¹⁷ Three weeks after the ban of Telegram, Iranian user levels returned to their pre-filtering numbers. 118 Interestingly, a year after the Telegram ban, by April 2019. government agencies also returned to the app, including the Islamic Republic of Iran Broadcasting. As Radio Free Europe/Radio Liberty (RFE/RL) reported at the time. "One reason was Telegram's effectiveness in disseminating information during devastating floods" that hit parts of the country in March 2019. 119

In January 2021, the encrypted-messaging service Signal became the most recent app to be blocked. On January 14, 2021 authorities ordered that Signal be removed from Cafe Bazaar and Myket as users around the globe, including many Iranians, migrated from WhatsApp to Signal due to privacy concerns. ¹²⁰ On January 25, 2021, Iranian users reported connection problems with the messaging app. In response, Signal tweeted, "Unable to stop registration, the IR censors are now dropping all Signal traffic. Iranian people deserve privacy. We haven't given up."121 According to an Al Jazeera report, Signal was intermittently blocked during 2016 and 2017, but didn't have a substantial Iranian user base at the time.¹²²

Where blocks on applications don't work, cybercrime laws help tighten control over Iranian netizens. Under the guise of cybercrime laws, authorities have made countless arrests over the years for Internet activities, with the help of FATA's forty-two thousand civilian "volunteers" who police the Internet. The exact number is uncertain, had arrested some seventy-five thousand people over an eight-year period for online activities—some merely for criticizing the government.¹²³ The Human Rights Activists in Iran group reported that, between January 2017 and January 2021 alone, at least three hundred and thirty-two people were arrested just for their online activities; of that number, one hundred and nine were arrested for Instagram posts.¹²⁴ The arrests tend to follow a familiar pattern. Instagram influencers are "harassed, arrested." and prosecuted by Iranian authorities, which activists say pressured them to 'confess' their alleged crimes, sometimes on state television."125

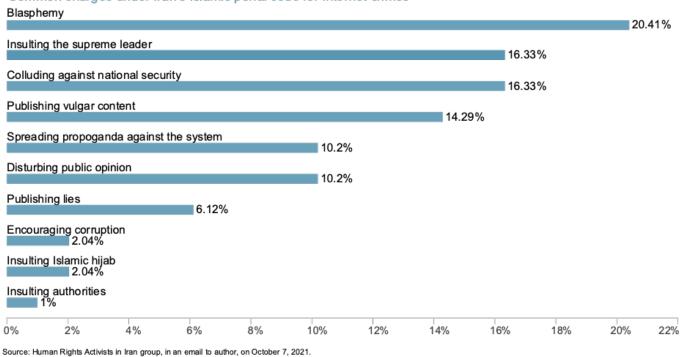
Although there are countless examples, some caught the attention of international headlines, given the preposterous nature of the charges. In 2014, six young Iranians were briefly imprisoned for posting a video of themselves dancing on Tehran rooftops and in an alleyway to Pharrell Williams' hit song "Happy." Authorities at the time described it as an "obscene video clip that offended the public morals and was released in cyberspace." 126 The

youth were handed sentences of up to one year in prison and ninety-one lashes, which were suspended for three years—in other words, the sentence wouldn't be carried out as long as the accused didn't reoffend. In 2016, FATA although in October 2018, Iran's cyber police claimed it conducted a two-year "sting operation" that consisted of monitoring some three hundred Instagram accounts. At least eight people were arrested, including Instagram model Elham Arab. known for her wedding-dress shoots without hijab in full hair and makeup. The court charged the models with allegedly "promoting corruption" and "immoral and un-Islamic culture and promiscuity" and "spreading prostitution." Arab later appeared on state television in a black chador and was forced to renounce her actions. 127 In the wake of the crackdown. Instagram model and beauty influencer Elnaz Golrokh managed to flee Iran with her Iranian model boyfriend.¹²⁸ Golrokh continues to be a beauty influencer (@elnaz golrokh) and has 4.1 million followers, but works from Dubai.

> Another well-known case is that of eighteen-vear-old Maedeh Hojabri, who posted videos of herself dancing in her bedroom to Western and Iranian pop music on her now-suspended Instagram with six hundred thousand followers.¹²⁹ Hojabri was arrested in 2018 along with a number of other content creators. Her arrest prompted Reihane Taravati, one of the participants in the viral

Social media arrests in Iran (January 2017 - January 2021)





"Happy" video, to tweet: "You arrested me for being #Happy when I was 23. Now you arrest #MaedehHojabri and she is only 18! What will you do to the next generation?"130 It is worth noting that dancing is not illegal in Iran, though its Islamic Penal Code is unclear about what are considered "acts against morality." The arrest of Hojabri prompted other Iranian women to film themselves dancing in solidarity, using the Persian hashtag #رقص جرم نیست (#Dancing Isnt A Crime).¹³¹

Just weeks after Hojabri's arrest, in July 2018, authorities in the southern port city of Bandar Abbas arrested forty-six Instagram models and photographers for allegedly posting "immoral images" on the app related to beauty salons, photography, and wedding businesses.¹³² In January 2019, female Instagram influencers were reportedly contacted by FATA and given one week to delete photos in which they appeared without hijab, or else face account suspension.¹³³ They included Mahdis Food (@MahdisFood) and Tina Entezari (@tina_entezari1 and @tinaa.entezar). "Subject to the laws of my country the Islamic Republic of Iran." is written in Persian on both of Entezari's Instagram bios.¹³⁴

In October 2019, Instagram content creator Sahar Tabar, known for her zombie/plastic-surgery-gonewrong look, the product of digital editing and makeup, was arrested on charges of alleged "blasphemy, instigating violence, illegally acquiring property, insulting the country's dress code, and encouraging young people to commit corruption." The minor's Instagram account has since been removed: however, her photos and videos continue to circulate on Iranian social media accounts. At the beginning of the pandemic in March 2020, authorities arrested five people over a viral video compilation with computer-generated eggplants raining from the sky.¹³⁶ "Due to the current coronavirus epidemic thoughts of a catastrophic end have been occupying the minds of some religious believers and the police and security bodies may have interpreted the video clips from this perspective as public security threats or insults to religious beliefs." Radio Farda reported at the time. 137

The crackdowns on social media aren't limited to Instagram. In December 2016, the SCC ordered Telegram channel administrators with over 5,000 subscribers to register with the Ministry of Culture and Islamic Guidance. Within a month, more than seven hundred channels made the move. In January 2017, twenty-two administrators with reformist-aligned Telegram channels were arrested in southern Hormozgan Province, allegedly for "spreadanxiety among people and spreading immoral content and unlawful propaganda."138 Months later, in March 2017,



Iranian journalist Mohammad Mosaed's now-deleted tweet (He uses a new Twitter handle (verified): @2mohammadmosaed). Photo credit: Twitter screenshot.

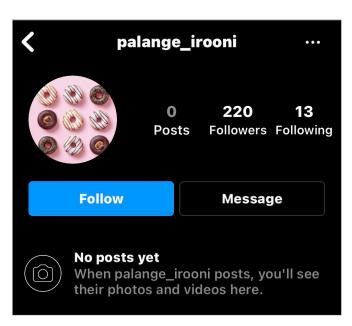
authorities arrested the administrators of twelve reformist-aligned Telegram channels. Not only was their content deleted, but their names were changed. The crackdown may have been related to the May 2017 presidential election, as social media, particularly Telegram, played a role in boosting President Rouhani's popularity in the 2013 election.139

During a nationwide Internet shutdown in November 2019, investigative journalist Mohammad Mosaed tweeted in English: "Knock knock! Hello Free World! I used 42 different proxy [services] to write this! Millions of Iranians don't have internet. Can you hear us?" He was imprisoned for that tweet for sixteen days. In February 2020, Mosaed was arrested and imprisoned for several months over his criticism of the Iranian government's poor handling of the coronavirus. He was forced to delete his Telegram channel ing falsehoods, disturbing public peace, creating fear and and Twitter account. In January 2021, Mosaed fled Iran to avoid an almost-five-year sentence and a two-year ban on social media and journalism activities on charges of allegedly "colluding against national security" and "spreading propaganda against the system." ¹⁴⁰

Like Mosaed, many journalists and even ordinary citizens have been arrested for either their critical social media posts or reporting on the coronavirus that brought into question the government's official narrative. For example, in March 2020, Mehdi Hajati (@MehdiHajati), a former Shiraz City Council member turned civil-rights activist, tweeted criticism of the Islamic Republic's botched coronavirus response. He was arrested the same month and given a one-year sentence and two years of exile on charges of allegedly "spreading propaganda against the system." At the time, Hajati's Twitter handle was briefly not accessible (he has since fled Iran in November 2021).¹⁴¹ By April 2020, FATA's "combatting online rumors" group, which was set up due to the pandemic, had arrested three thousand and six hundred people for allegedly spreading online what it described as "rumors" regarding COVID-19.142

Niloufar, an influencer awaiting a prison sentence for her social media posts, explained that the government is cracking down on social media because, "it shows how things are" in Iran.¹⁴³ She said, "And they have less control over it, they want every image to be published from their channels so troll armies to silence dissidents. Online abuse-which they can censor everything showing an untrue image of people living here."144 Niloufar noted that many of her colleagues have left Iran because they are unable to work. Many of those who stay behind close their Instagram accounts.

Niloufar also shared that many of her friends have been asked to visit a safe house by callers using blocked or hidden phone numbers—which is typical of Iranian intelligence. When they arrive, IRGC intelligence agents ask them to hand over their phone and make them log in to their social media accounts. "They opened Instagram and asked, 'Why did you post this? Tell us who are you connected with abroad? What channels do you watch?' Then they say, 'You cannot have Instagram anymore; you should be silent. And if you do this again with another account—if we catch you with another Instagram account trying to write about demonstrations or against [President Ebrahim] Raisi, we will put you in iail." Niloufar said that one of her friends who experienced this had only two hundred followers on Instagram.¹⁴⁵ Several Instagram accounts that the author follows have disappeared or now have blank pages. For example, Palange Irooni (@ palange irooni), which once boasted more than 1.1 million followers and did paid advertisements for designer watch shops and diet pills, is now a blank page with fewer than three hundred followers.¹⁴⁶ It is unclear what happened, but it is safe to assume that the entertaining, but often surreal, videos and photos of Iranians with too much



What Palange Irooni's Instagram page looks like now.

Photo credit: Instagram screenshot.

plastic surgery and/or makeup making social commentary rubbed authorities the wrong way.

Another step Iran's intelligence and security apparatus has taken over the years is using state-sponsored includes doxing, hacking, harassment, surveillance, and threats—is weaponized to intimidate with the goal of silencing activists, journalists, and even prominent figures in the diaspora.147 It's well known that women are targeted more than men and are prone to misogynistic online abuse and threats of violence. As a result of the coordinated harassment, dissidents have not only been more cautious offline, but also "more reserved about the topics they chose to publicly speak or write about."148 In some instances, mass-reporting is used as another tactic which results in a social media account being suspended, sometimes permanently. Most recently this happened to a prominent satire Twitter account, known as Ayatollah Tanasoli (@tanasoli), whose name translates as Ayatollah "Genitals". The account, which continues to be suspended as of writing this report, had over 200,000 followers, and used its platform to highlight human rights violations and mock the leadership of the Islamic Republic.¹⁴⁹

While there is not enough information available on how Iran's state-sponsored troll armies work, in March 2021, a video tutorial went viral in Iran that demonstrated how to utilize software that "adds automated inauthentic likes to a tweet."150 In the video, the software appeared to have an antigovernment category to promote a tweet; in other words, an army of bot accounts disguised as antigovernment accounts, such as advocates of overthrowing the Islamic Republic.¹⁵¹

INTERNET SHUTDOWNS

ince 2011, Iran has also been making moves to implement a domestic or "halal" Internet known as the National Information Network (NIN), which hosts websites, applications, servers, and a lot of Internet infrastructure separate from the international Internet. In other words, if Iran disconnected from the international Internet gateways, this infrastructure would remain online.¹⁵² The authorities allege the goal of the domestic Internet is to protect Iran's Internet infrastructure from foreign cyberattacks and to counter a "cultural invasion" from the West but it is clear that the NIN is also being used to disconnect Iranian users from the international Internet. 153 To accommodate the NIN. Iranian authorities have increased Internet speeds, while also violating net neutrality by charging Iranians double in fees if they want to access foreign websites.¹⁵⁴ More importantly, the NIN has made it easy for authorities to shut down the Internet, a relatively new development over the past two years, as all domestic websites and apps—such as banking, media, and government websites—were already on domestic servers.¹⁵⁵ Prior to the November 2019 protests, the Iranian government relied mainly on banning access to websites, though it also resorted to Internet throttling, such as during the 2009 Green Movement and 2013 presidential election.

Whenever there are protests, it is now safe to assume that an Internet shutdown will follow. As ARTICLE19 reported: "Within internal meetings of the Iranian judiciary, officials have indicated that shutdowns can be triggered in the event of any unrest in the country." 156 This was the case during the November 2019 protests. From November 16, 2019, until November 21, 2019, there was a nationwide Internet blackout with Netblocks reporting only 4-7-percent connectivity.¹⁵⁷ A year later, on the anniversary of the antigovernment protests. Netblock reported "partial disruption" to the Internet for two hours. 158 Since the November 2019 protests, there have been at least five Internet shutdowns, most significantly during times of unrest.¹⁵⁹ In March 2021, authorities "impos[ed] a near total Internet shutdown" by cutting of mobile Internet in southeast Sistan and Baluchistan Province to quell protests and hide human-rights violations and brute force by security forces.¹⁶⁰ What is noteworthy in this instance is that 96 percent of the province's impoverished population, the Baluch ethnic minority, is

said to access the Internet via mobile-Internet carriers, as this is much more affordable than having a personal computer and landline infrastructure is underdeveloped.¹⁶¹

Beginning July 15, 2021, an Internet and mobile-Internet disruption took place in southwest Khuzestan Province. According to Netblocks, there were "widespread user reports of cellular network disruptions, consistent with a regional Internet shutdown intended to control protests." Like Sistan and Baluchistan, Khuzestan residents depend on mobile-Internet carriers due to underdeveloped landline infrastructure. Netblocks reported that the disruptions knocked out 3-4 percent of Iran's mobile data. 162 Kurdish-Iranian exiled activist and journalist Behrouz Boochani tweeted on July 21, 2021:

Since the November 2019 protests, there have been at least five Internet shutdowns, most significantly during times of unrest.

"[T]he last time that the Iranian gov[ernment] shut down the internet, at least 1500 people were killed over a few days."163 As protests spread to other cities and towns, disruptions were reported as well. On the two-year anniversary of the November 2019 protests, Iranians reported Internet speeds had "decreased dramatically," while some mobile-Internet users reported temporary outages.¹⁶⁴

As of writing this report, the most recent incidents of a near-total mobile-Internet shutdown took place for almost twenty-four hours on November 25, 2021, allegedly after an Instagram account posted a call for water shortage protests after related protests—and a day later, on November 26, 2021, in the vicinity of the Isfahan farmer protests. 165 Authorities have recognized a direct correlation between disrupting or shutting down the Internet and demonstrations, which is why they will continue to be a tool of the ship is not intended to be blamed on sanctions, but that Islamic Republic in times of strife.

Miaan Group's Rashidi said that the "biggest fear" of Iranians is an Internet shutdown. He emphasizes, "Not having access to the internet simply means, not having a tool to communicate and not being connected to each other and the rest of the world securely." 166 Yet, shutdowns prove costly for the Iranian government. According to Internet. 168

in Ahvaz, the capital of Khuzestan Province—just months
Netblocks, the November 2019 Internet shutdown cost the country \$369.5 million a day. 167 With the NIN, however, Internet shutdowns will become less costly for the Iranian government. This is, in part, because of US sanctions on the country—meaning that government censor-US sanctions have accidentally played a role in helping with Internet censorship. Not only are sanctions forcing Internet businesses not to use foreign entities like hosting services, but Iran's inability to conduct business or banking transactions means that there is less need for the country to have a connection to the international

SANCTIONS IMPACT 169

ince the 1979 revolution, the Islamic Republic of Iran has been under some form of US sanctions. The Iran-Iraq Arms Non-Proliferation Act of 1992 blacklisted entities that "transfer goods or technology" to Iran or Iraq that could contribute to weapons of mass destruction.¹⁷⁰ In 1995, President Bill Clinton signed Executive Order 12959, which "prohibits re-exportation of goods or technology to, and investments in, Iran." At one point, technology-related sanctions on Iran were so extensive that they "could encompass everything developed in the computer age." It wasn't until the 2009 Green Movement that these restrictions were seen in the United States as problematic, as they were preventing Iranians from accessing certain information and communications technology.

In 2010, the US Treasury Department's Office of Foreign Assets Control (OFAC) issued a Personal Communications General License, which "authorizes the exportation from the United States or by US persons, wherever located, to persons in Iran of no-cost services incident to the exchange of personal communications over the Internet and no-cost software necessary to enable such services." The goal was to provide a free flow of informa-

tion. This included services such as blogging (e.g., Blogger), email (e.g., Yahoo!), instant messaging (e.g., MSN Messenger), photo and movie sharing, social media (e.g., Facebook), and web browsing.¹⁷² Still, many ICT companies continued not to export technology or offer services to Iranians.¹⁷³ Realizing this, in 2012, OFAC expanded the license to include browsers and their updates (e.g., Firefox), document readers (e.g., Acrobat Reader), personal data storage (e.g., Dropbox), and plug-ins (e.g., Java), among others.¹⁷⁴ OFAC amended the general license before the June 2013 presidential election to include antivirus software (e.g., Norton), cell phones (e.g., iPhones), computers (e.g., HP), and website hosting.¹⁷⁵

When the multilateral nuclear

accord, also known as the Joint Comprehensive Plan of Action (JCPOA), was signed in 2015, sanctions related to technology were not altered, as they were not nuclear related. As a result, these sanctions remain in place and have not evolved to include the latest ICT, such as cloud hosting services. Additionally, despite several amendments to the general license, the vague language of technology-related sanctions continues to confuse tech companies, which are risk adverse and fear changes in interpretations depending on the political winds out of Washington.¹⁷⁶ The most recent example of a company being punished for violating US technology sanctions is SAP Software Solutions. The German software giant was slapped with a penalty of \$8 million in April 2021 for exporting US software to Iranian users. During 2010 and 2017, SAP allowed 2,360 Iranian users to access US-based cloud services, and sent software and upgrade patches more than twenty thousand times. 177

These provisions are meant, in the words of academic Pinky Mehta, "to support Iranian civilians' freedom of information and communication, and to counter human rights abuses perpetrated by the Iranian government." And yet, they are hurting ordinary Iranians and their

...the vague language of technology-related sanctions continues to confuse ICT companies, which are risk adverse and fear changes in interpretations depending on the political winds out of Washington.

access to information.

Despite numerous attempts to update the general license, in September 2017, the Apple App Store removed more than a dozen popular Iranian apps including Digikala (Iran's version of Amazon), and Snapp (Iran's version of Uber). Around the same time, Iranian iOS app developers received the following message from Apple: "Under the US sanctions regulations, the App Store cannot host, distribute, or do business with apps or developers connected to certain US embargoed countries."179 A week after Apple revoked apps, Google Play did the same thing. 180 Why Apple and Google suddenly became overzealous with compliance despite a general license is unclear, given that the United States did not withdraw from the JCPOA until May 2018. "Restrictions on apps have instead handed Iran's government a propaganda gift, allowing it to rail against American tech companies for discriminating against Iranian business people and consumers." wrote the Bloomberg editorial board at the time.¹⁸¹ In March 2018. Apple restored Iranian access to the App Store. 182

Ironically, US sanctions were also a "gift" to Iranian authorities when it came to Internet censorship. After the reimposition of broad-based sanctions in May 2018. after the US withdrawal from the JCPOA. US infrastructure providers—cloud and hosting companies such as Amazon Web Services, DigitalOcean, GoDaddy, and Google—stopped providing platforms and services to Iranian users. This forced Iranian companies to use domestic infrastructure services under the NIN. including Daal and Balad (Iran's version of Google Maps). which is, in part, why it was so easy for the Islamic Republic to shut down the Internet for a week during the November 2019 protests. 183 When companies like Amazon Web Services and DigitalOcean deny access to Iranians due to sanctions, it impacts other elements as well. For example, the circumvention tool Lantern was blocked because it uses a US infrastructure-provider company.¹⁸⁴ The service was later restored.

The Iranian government has also used sanctions to warn that the United States will cut Iranians from the international Internet, though US officials have repeatedly denied this. "US sanctions indirectly provided the groundwork and ammunition for increased implementation of the NIN, partly as a result of necessity and partly by playing into Iranian government propaganda

regarding vulnerability to outside forces, justifying intensification for NIN implementation," ARTICLE19 notes. In turn, this false accusation has been used to justify further developing the NIN. Most recently, in early March 2021, Internet disruptions in Iran were blamed by the ICT Ministry on an "undersea cable fault in the Mediterranean Sea." The ministry then claimed the problem couldn't be fixed until March 24, 2021 due to a NATO naval exercise in the Mediterranean, but there was no ongoing drill at the time. IB8

It is worth noting that there has been some progress with OFAC. In January 2021, Microsoft-owned GitHub announced that it will offer its free and paid services to Iranians again after OFAC issued the open-source hosting site a license. In 2019. GitHub had restricted its services to the Iranian developer community to comply with US sanctions.¹⁸⁹ "Over the course of two years, we were able to demonstrate how developer use of GitHub advances human progress, international communication, and the enduring US foreign policy of promoting free speech and the free flow of information," wrote GitHub Chief Executive Officer Nat Friedman. 190 Just weeks before GitHub stopped its services for Iranians. in December 2018. Slack had shut down the accounts of users of Iranian heritage who were visiting Iran. The users who were working while in Iran had been identified via their Internet Protocol (IP) addresses and banned in order to comply with US sanctions.¹⁹¹ Often when users are banned, it is done without a warning or an option to backup and export information. 192 This is just one of many examples of how US sanctions are adversely affecting not only ordinary Iranians, but those of Iranian heritage.

In October 2021, a bipartisan group of twenty-one members of Congress called on the Biden administration to "authorize access to information technology for the people of Iran" and "to act swiftly to clarify allowable activities and make needed changes to enhance the free flow of information in Iran," referring to OFAC's general license. The campaign, which was spearheaded by the Center for Human Rights in Iran (CHRI) and Public Affairs Alliance of Iranian Americans (PAAIA), has yet to see any changes implemented by OFAC.¹⁹³

CONTROVERSIAL INTERNET BILL

n July 28, 2021, the hardline majority parliament moved closer to implementing a bill that would curb online freedom. "The Cyberspace Users Rights Protection and Regulation of Key Online Services"—also known as the "Protection Bill"—would criminalize distribution, selling, and possibly the use of VPNs. Control of Iran's Internet gateways—infrastructure connecting the country to the Internet—would be transferred to a new entity supervised by the armed forces and security apparatus. The bill also calls for international tech companies offering email, hosting services, messaging, and social media to appoint an Iranian representative to comply with the country's rules and collaborate on content moderation and surveillance. 194 If international tech companies don't obey, their services would be blocked or constricted. However, as Iranian journalist Sayeh Esfahani observes, "because Iran is subject to both US and international sanctions, tech companies, especially American firms, are legally barred from conceding to the demands. Even Gmail and WhatsApp would likely be blocked going forward."195

While authorities claim the bill's goal is to protect Iranians, most beg to differ, "They're not concerned with ideology, they're concerned with defending itself and vaccinating itself against any social movements," Ali Reza, a civil-rights activist based in Iran, explains. 196 "Their concern in the end is about the formation of social movements and helping control the internet and cyberspace and all of its efforts is to control that space."197

Another element that would be included in the bill is a ranking system for users which would provide different levels of access to the Internet based on criteria such as age and profession. This has already been the case for those close to the establishment, including some academics and journalists who have been given access to uncensored Internet. 198 For example. Hossein Dalirian, an Iran-based journalist with alleged ties to the IRGC, went to Khuzestan Province during the water-crisis protests and tweeted on July 22, 2021: "The internet of Ahvaz city is connected and has no problems." ¹⁹⁹ Even though Internet shutdowns were widely reported in the province, based on the barrage of angry tweets calling Dalirian out, it quickly became clear he was one of the journalists given special access—"journalists' internet" as



Iranian tweets the Islamic Republic symbol combined with the North Korean flag. Photo credit: Twitter screenshot.

it's known—to toe the line of the establishment.

On news of the so-called "Protection Bill." reaction was swift. Just days before, forty-seven of Iran's largest tech companies—including Internet service providers, online retailers, and streaming services—issued a joint statement: "We stress that this bill will certainly not benefit Iranian internet businesses and its designers must know that its damages to local businesses will far outweigh its benefits."200 Iranian outlet Tejarat News, basing its information on a SCI report from September 2021, noted that eleven million Iranians would lose their income and employment if the bill passed.²⁰¹ Many Iranians took to social media using the hashtag #du- #du- #du- #du- #du- #dutection bill") and نه به طرح صيانت "No to protection") نه به طرح bill") to share their anger, frustration, and worries about the future of Internet access in their country. Some even tweeted photos of the universal hand signal for help and likened the move to Iran becoming North Korea in terms of international isolation. One student tweeted in English: "On behalf of Iranian students, if the new internet censorship rules are applied, we would no longer have ANY access to the world, to scientific papers, we would be banned from studying! Please hear us!"202 As of December 2021, an online petition, "Opposition to plans to restrict international Internet access and social media filtering," has garnered more than 1.1 million signatures. 203

News of the bill left many Iranians disheartened. Video creator Ryan the Gray said that his goal was to become a content creator, but now he has been trying to find a way to leave permanently. He clarified, "I didn't care if I was in Iran or not, but the past few years

Instagram business owners to start an online campaign against the bill.209

Around the same time that the special commission convened, in September 2021, Tejarat News reported that Iranians were having trouble accessing Telegram and Twitter via circumvention tools.²¹⁰ When Facebook and its family of apps, including Instagram and WhatsApp, experienced a global outage for several hours on October 4, 2021, some Iranians thought the incident was tied to their government permanently blocking access to the international Internet.²¹¹ A former Iranian journalist tweeted, "[My] kid came and said, 'Mom, they nationalized the net.' I said, 'Why?' He said, 'I don't have WhatsApp and Instagram.' I was so flustered when I heard what happened, I was speechless."212 Many Iranians also frantically reached out to their relatives living abroad to find out if they had been disconnected from the international Internet.²¹³ The outage demonled me to believe that the future looks very grim here. strated not just how dependent much of the world is on

The [Facebook] outage demonstrated not just how dependent much of the world is on such platforms as a means of communication, but especially for Iran, as it's the Iranian people's main connection to the outside world.

For example, if the internet gets shutdown by the government there is nothing I can do here."204 Ryan adds, "If it happens it will take Iran back to middle ages and to the outside world." people will suffer heavily. No sane person wants this internet bill."205 Similar comments were made by journalist Mahyar, who until recently was based in Iran. "Life would become really unbearable if the bill is fully implemented," he says.²⁰⁶ "Right now at least people can watch series and spend time on Instagram. That bill would take away the smallest joys."207 A special commission to review the so-called "Protection Bill" con-school year started in September 2021, while an Iranian vened in September 2021.²⁰⁸ According to Niloufar, the influencer, there's now a push by ordinary Iranians and

such platforms as a means of communication, but especially for Iran, as it's the Iranian people's main connection

Iranians continue to experience Internet disruptions, with some users unable to access services like Google's email and search engine, Instagram, and Wikipedia. Others reported that circumvention tools "have been either working with great difficulty or not connecting at all."214 Some officials blamed the Internet disruption on the surge of students using the Internet since the outlet claimed that the Supreme Council of Cyberspace had not issued new licenses purchased bandwidth



What Hooman Ghorbanian's Rubika account looks like (he posted this on Twitter). Photo credit: Twitter screenshot.

from international providers, per its mandate. However, ARTICLE19 found that "data did not necessarily corroborate this theory."215

In late October 2021, Iran experienced a nationwide cyberattack on gas stations, just three weeks before the anniversary of the November 2019 antigovernment protests.²¹⁶ Hardline politicians used the incident as iustification to push forth the "Protection Bill" despite Iran's fuel infrastructure not being connected to the Internet, according to former Deputy ICT Minister Amir Nazemy.²¹⁷ A day after the cyberattack, on October 27, 2021, Mehrdad Weiss Karami, secretary of parliament's special commission assigned to review the bill, said: "As soon as people see that the enemy can hit the country in a cyberattack, it shows that we must pay special attention to the areas related to cyber defense and the laws that guarantee it."218

One brash move to promote the NIN was the development of a carbon copy alternative to Instagram, known as Rubika. In August 2021, the state-supported domestic photo-sharing app was the center of controversy when hundreds of exact copies of prominent Iranian Instagram accounts appeared on Rubika without the permission of account owners.²¹⁹ The serial identity theft was first reported by Hooman Ghorbanian, an Iran-based social media marketing specialist, who had discovered his Instagram account (@hooman media) had been replicated—complete with all his photos and captions—on Rubika without his consent.²²⁰ Soon it became clear this had happened to not only prominent Iranians in society. but in some cases, ordinary people. After Rubika refused to remove the fake accounts. Iranians launched a social media campaign using لروبيكا ("Rubika)" that called on people to report the app on Google Play. Before long, countless one-star ratings appeared—some Iranians left English reviews calling the app a "thief of information," "scam," and "disaster"—and within days, Google banned Rubika on August 19, 2021. Many Iranians, including Ghorbanian, are under the impression that the illegal move to copy accounts are not just a push to boost the popularity of the domestic app, but also tied to the so-called "Protection Bill" that would block Instagram in

As of November 2021, parliament's special commission has convened on the bill on several occasions, and even livestreamed discussions on Instagram—though the special commission has yet to actually debate the legislation, reported ARTICLE19.²²² Nevertheless, a member of the special commission claimed the bill will be ratified in mid-March 2022.²²³

CAN THE INTERNET "LIBERATE" IRAN?

or years, there was a theory that "liberation technology"—referring to ICT—would help free people living under repressive regimes such as the Islamic Republic. This was best exemplified during the 2009 Green Movement, which many Western media outlets dubbed Iran's "Twitter revolution," though that was not the case.²²⁴ Much of the street mobilization was via word of mouth and text message. Once the brutal crackdown began, it turned ordinary Iranians into citizen journalists who documented the scenes of violence with their cell phones and cameras, which were then uploaded onto YouTube, then amplified on social media. Many activists mobilized using Facebook, which was blocked.²²⁵

authoritarian governments would respond, and saw the world through the lens of what scholar Evgeny Morozov

because it was an "important communication tool in Iran"—a grand overstatement—Iranian authorities saw it as a Western soft-power tool with the ultimate goal of bringing about regime change in Iran.²²⁸ As a result, the security establishment of the Islamic Republic viewed the post-election protests and ICT as reasons to build its censorship and cyber-monitoring capabilities.

The December 2017-January 2018 protests were initially prompted by videos of hardliners in Mashhad protesting the Rouhani government, which were amplified on Telegram only to spread like a wildfire. The protests over mismanagement, corruption, and disillusionment with the clerical establishment spread to more than eighty provin-Nevertheless, policymakers failed to take note of how cial cities and towns. It would take Internet throttling and a violent crackdown to put an end to the unrest. The nationwide November 2019 protests—prompted by a sudden

"Social media is our only hope for making changes here! It has been our way of communicating with the world when we had no other chance! Everything else is banned and now they are going to cut our only hope to be heard by the world."

describes as "cyber-utopianism," or a "naive belief in the fuel hike—were quelled by a week-long Internet shutdown emancipatory nature of online communication."²²⁶ As demonstrated in 2009, social media were unable to prevent the countless human-rights violations committed by the Islamic Republic during the Green Movement.²²⁷ If anything, the Green Movement proved that information and communications technology could not be as liberating as some in Washington had hoped. And, as Morozov rightfully argues, when the US State Department reached out to Twitter at the time to delay its planned upgrade

and bloody crackdown in which security forces arrested and killed thousands. Nevertheless, the high number of arrests and deaths over the past few years hasn't deterred Iranians from participating in protests.²²⁹ If anything, protests have become normalized.

Niloufar, the influencer, explains that social media have made Iranians, "one hundred percent more vocal" because Iranians "have nothing to lose." She adds: "Social media is our only hope for making changes here! It has

been our way of communicating with the world when we had no other chance! Everything else is banned and now they are going to cut our only hope to be heard by the world."²³⁰ Every time the abuses of the security forces are amplified on social media, it reveals another brutal layer to the Iranian public, and undermines the clerical establishment's support base. This happened in August 2021, when hackers calling themselves *Edalate Ali* (Ali's Justice) released security-camera footage from Iran's notorious Evin Prison to the Associated Press.²³¹ The graphic security footage was amplified online and embarrassed Iranian officials, though it was not enough to cause tangible change in the Iranian prison system.

While this report has not been able to explore this element in detail, there is mounting evidence that social media have been connecting Iranians inside Iran with the diaspora—the most recent example of that being via Clubhouse. Social media have also given a voice to marginalized communities in the country.²³² This is precisely why the clerical establishment finds the Internet to be part of a "soft war" being waged against the Islamic Republic.²³³ Additionally, as IHRDC's executive director

Shahin Milani pointed out: "As a totalitarian state, the Islamic Republic controls the media narrative it wants the Iranian society to see. Therefore, when information posted to the social media negate the Islamic Republic's narrative, social media become a national security threat." ²³⁴

In 2010, academic Larry Diamond was one of many who held a cyber-utopian view that information and communications technology has "the consciousness." knowledge, and mobilizational capacity that will eventually bring down autocracy in Iran."235 Iranian protesters have tried and tested his discourse over the years with no success—thus far. This is coupled with the fact the Islamic Republic has, like many authoritarian governments, turned ICT into a tool of repression, whereby it can monitor, and even attack and silence dissidents with state-sponsored troll and bot armies.²³⁶ Diamond adds that, "A key factor affecting when that will happen will be the ability of Iranians to communicate more freely and securely online."237 The Islamic Republic fears and controls the Internet for this exact reason. With an Internet bill in the works, the clerical establishment knows it can kill any notion of "liberation technology" once and for all.

RECOMMENDATIONS

he Iranian government's widespread censorship of the Internet has been long in the making. While US sanctions have played a role in exacerbating a bad situation by cutting Iranians off from global apps and services, and forcing them to use Iranian versions, US sanctions aren't connected to censorship. The censorship onus falls largely on the clerical establishment. The Islamic Republic under three consecutive governments—Mahmoud Ahmadinejad, Hassan Rouhani, and now Ebrahim Raisi—has denied Iranians their online freedom, which is a human right.²³⁸

With 90 percent of its NIN developed, Iran is close to achieving its Internet independence. Iranians must remain online to connect safely with one another and connect to the world. Here are several recommendations for how to help Iranians.

- 1 Led by the Joe Biden administration, Western governments must work to ban the export of digital surveillance and filtering technology to authoritarian governments. As a case in point, California-based Blue Coat Systems Internet-monitoring devices have allegedly been detected in Iran.²³⁹
- The Biden administration and other Western governments must uphold end-to-end encryption and privacy standards without interference from governments to prevent any nefarious cooperation between technology companies and authoritarian states.
- **3** The Biden administration should be more vocal when activists, journalists, and ordinary Iranians are arrested for their Internet activities.
- While US sanctions have rules and exemptions, such as the General License D-1—which provides certain hardware, software, and services related to personal communications—tech companies are over-complying or reading the guidance restrictively. OFAC must broaden and update its General License D-1, and also provide guidance and assurance to tech companies—perhaps through a special liaison, or at least do routine outreach to ICT companies about any changes to sanctions laws. This also goes hand in hand with OFAC frequently updating its frequently asked questions (FAQs).

- of how the United States deals with disaster-relief aid and offer authorizations rather than exemptions, which would allow "US agencies to regulate these issues, grant licenses for the exportation of goods and services that would have otherwise been prohibited under sanctions, update and change the scope of these licenses, and enact penalties against infringers." ²⁴⁰ By whitelisting services, OFAC would be able to provide certainty in most instances.
- **6** In the absence of US cooperation, tech companies must devote resources and time, in the manner that GitHub did, to acquire General Licenses for their products.
- Social media companies must increase resources on Iran to support Iranian users. This includes keeping Persian-language content up and ensuring that apps remain accessible, e.g., continuing to offer "lite" versions, which use less data.
- Policymakers and Internet-freedom advocates should work together to implement a playbook in the event that another major Internet shutdown happens. This should include, at the very least, coordinated statements condemning the government-imposed Internet shutdown.
- Tech companies should better communicate with users about potentially being impacted by US sanctions. Tech companies should also put an appeals system in place to allow users recourse if they are wrongly targeted. One too many instances have happened in which not just Iranians inside of Iran, but also diaspora Iranians, have been denied access to their accounts merely for having Iranian heritage.
- (1) Finally, the Biden administration needs to examine the impact of current US sanctions policy to understand how US policies unknowingly support the NIN

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