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Facebook Confronts a Crisis of Trust

People just submitted it. I don't know why. They "trust me." Dumb fucks.

– Mark Zuckerberg, 2004, to a friend regarding user data collected by Facebook¹

We're not going to traffic in your personal life. [. . .] Privacy to us is a human right. It's a civil liberty.

– Apple CEO Tim Cook, appearing on MSNBC on April 6, 2018²

On March 16, 2018, news broke implicating Facebook CEO Mark Zuckerberg's company in the use of illegitimately obtained Facebook user data to influence the 2016 U.S. presidential election and U.K. vote to leave the EU (known as Brexit). In 2014, the political data analysis firm Cambridge Analytica (CA), backed by wealthy Republican activist Robert Mercer and Stephen K. Bannon, who in August 2016 became CEO of President Donald Trump's election campaign, improperly accessed data from 87 million Facebook accounts. CA and its clients, including the Trump campaign, used the data to model and attempt to manipulate voter behavior. After first learning of the unauthorized use of data in 2015, the social media giant chose not to notify effected users.

By 2018, Facebook's platform had attracted 2.1 billion users worldwide to connect and interact online. The premise of Facebook's free service was to help friends, family, colleagues, and others form online communities. However, its business model depended on selling advertisements that targeted users based on information the company collected about them from their Facebook profiles and activities on the platform (**Exhibit 2** contains info about Facebook Ad Targeting). Although it gave users the ability to "opt out" of sharing personal information in certain circumstances, they were not generally afforded the opportunity to give informed consent before their data was collected and used by Facebook and, often, third parties. Many users did not understand that their data was being collected and used at all, or were not aware of the extent of Facebook's harvesting and analysis.

On March 20, 2018, four days after the news broke, Zuckerberg and Facebook Chief Operating Officer Sheryl Sandberg (HBS 1995) elected not to attend the company's regular town hall forum with all employees. Instead, they sent Facebook's deputy counsel to explain what had happened. Zuckerberg did not comment publicly until a March 21 CNN interview, in which he focused on the political implications of CA's actions, noting that it had violated Facebook's rules for application (app) developers. He said he regretted the incident, but did not comment on the impact on Facebook's other users. (**Exhibit 1** contains a timeline of Zuckerberg apologies.)

Meanwhile, lawmakers called for Zuckerberg to testify about the episode. On April 10, 2018, he appeared before the Senate Commerce and Judiciary Committees; the next day he sat before the House of Representative Energy and Commerce Committee. In the Senate hearing he acknowledged the need for the government to regulate Facebook and other social media sites. The Federal Trade Commission (FTC), the U.S. regulator responsible for protecting consumers from anticompetitive and unfair business practices, opened an investigation into Facebook's treatment of user privacy.

On June 4, 2018, the *New York Times* revealed that Facebook had shared user data with 60 smartphone makers such as Microsoft, Apple, Samsung and Blackberry, writing that the partnerships "raise concerns about the company's privacy protections and compliance with a 2011 consent decree with the Federal Trade Commission." User data included "access to the data of users' friends without

their explicit consent, even after declaring that it would no longer share such information with outsiders," according to the report. According to Sandy Parakilas, former head of Facebook's third-party advertising and privacy compliance department, who left the company in 2012, "It appears to contradict Facebook's testimony to Congress that all friend permissions were disabled."

In dealing with this crisis over data integrity, Zuckerberg found himself confronting the same dilemma that so many CEOs were facing. In 2018, data and privacy issues stretched beyond Facebook, CA, and the technology sector. Companies, governments, and others were increasingly collecting, storing, and analyzing user data gleaned from online interactions and via smart devices, while individuals consciously and unwittingly provided more and more information about themselves. Corporate leaders had to ask: How should information on individuals be controlled? Who "owned" this data? How could it be protected? Should its use be regulated? Was it ethical to use data for commercial purposes, with or without users' consent? Zuckerberg also had reason to worry whether this episode would have a material impact on Facebook's users and their use of the site.

The Cambridge Analytica (CA) Elections Scandal, 2014–2016

Leading up to the 2014 U.S. Congressional elections, Alexander Nix (future CA CEO) approached Bannon and hedge-fund billionaire Mercer and his daughter Rebekah Mercer, who were active in Republican Party politics. Nix touted his firm's methodology for creating detailed profiles of individuals, including their political views, which could be used to influence their voting behavior. Like Nix, Christopher Wylie, a political operative and researcher, was "interested in using inherent psychological traits to affect voters' behavior." Wylie noted, "Bannon was intrigued by the possibility of using personality profiling to shift America's culture and rewire its politics."

To create psychographic voter profiles on a national scale, Wylie's team needed to obtain vast amounts of personal data. Past political data analysis relied on previous voting and consumer-purchasing behavior to extrapolate individuals' political views but could not reveal, for example, if a voter was a neurotic extrovert, a religious introvert, or interested in occult topics—psychological traits that, according to Nix and Wylie, offered an effective basis for designing political messages.

Instead, Wylie turned to Aleksandr Kogan, a Russian-American Cambridge University psychologist who was familiar with designing online quizzes and apps that collected data about Facebook users and their Facebook friends. In June 2014, Kogan contracted for \$800,000 to deploy the data-collection method on behalf of CA. Approximately 270,000 users took Kogan's quiz and consented to share their data. Through those users' Facebook networks, Kogan accessed data of 87 million other users without those users' permission. Kogan told Facebook and users that the data was for academic purposes, but instead provided it to CA in violation of Facebook's policy.

About 30 million profiles contained sufficient data to compile psychographic voter profiles. The data included information on users' demographic identifiers, psychological traits (conscientiousness, extraversion, neuroticism, etc.), IQ, political views, employment, and "sensational interests" (e.g., in militarism, guns, drugs, black magic, paganism, foreign travel).

Mercer invested over \$15 million in Nix and Wylie's operation, which was housed within U.K.-based defense contracting firm SCL Group (SCL). Nix, a U.K. citizen, and Wylie, a Canadian, remained employed at SCL even while setting up U.S.-based Cambridge Analytica in 2014. Many CA operations and employees remained at the British SCL. An election lawyer warned Nix, Bannon, and the Mercers that CA risked violating U.S. laws that restricted foreign national involvement in U.S. elections. CA claimed neither Nix nor any foreign national undertook strategic or operational activities in any U.S. election campaigns in which CA data was used.

In November 2015, CA, through Wylie's Canadian firm, contracted with Vote Leave, the group advocating U.K. withdrawal from the EU in the June 23, 2016 Brexit referendum. Vote Leave officials—later advisers to Prime Minister Theresa May, who was elected after the Brexit vote—paid almost \$1 million to CA via the Canadian shell company. Wylie claimed CA's data and analysis may have influenced the Brexit vote.

In the 2016 U.S. election cycle, CA was engaged first by Republican Senator Ted Cruz's campaign for president and later by the Trump campaign. CA data allegedly was used to identify target audiences for online advertisements and fundraising messages, model voter behavior and expected turnout, purchase \$5 million in broadcast advertising, and help to decide where Trump should travel during the campaign. The Trump campaign later denied that CA data influenced its decisions.

Alleged Russian Interference in the 2016 U.S. Election

Following the 2016 U.S. presidential election, news broke that groups and shell entities controlled by Russia had spent \$100,000 over two years to purchase 3,000 politically-slanted and erroneous Facebook ads intended to influence U.S. voters to vote for Trump over Democratic candidate Hillary Clinton. Overall, the two campaigns themselves spent tens of millions of dollars combined on digital advertising. In addition, in October 2017, WikiLeaks founder Julian Assange claimed that Nix had contacted him during the campaign intent on obtaining private emails belonging to Clinton. Finally, in 2014-2015, CA may have contracted with Russian oil conglomerate Lukoil, whose executives had close ties to the Russian government. In a hearing before the U.K. parliament, Nix stated, "As far as I'm aware, we've [. . .] never worked with a Russian organization in Russia or any other country, and we don't have any relationship with Russia or Russian individuals."

News of CA's Data Breach Breaks in March 2018

After departing CA in 2014, Wylie started a rival data firm and was sued by CA for allegedly using their intellectual property and violating non-compete agreements. In January 2018, he went to authorities in the U.K. and U.S., along with the press, to blow the whistle on CA. On March 16, 2018, *The Observer*, the U.K. Sunday magazine published by *The Guardian* newspaper printed his take: "We exploited Facebook to harvest millions of people's profiles and built models to exploit what we knew about them and target their inner demons," Wylie said. *The Observer* reported:

The evidence Wylie supplied to UK and US authorities includes a letter from Facebook's own lawyers sent to him in August 2016, asking him to destroy any data he held that had been collected by [. . .] the company set up by Kogan to harvest the profiles. [. . .] "Because this data was obtained and used without permission, and because [Kogan] was not authorised to share or sell it to you, it cannot be used legitimately in the future and must be deleted immediately," the letter said.

According to Wylie, "They waited two years and did absolutely nothing to check that the data was deleted. All they asked me to do was tick a box on a form and post it back."

Although laws in California required companies to notify users if their data was compromised, Facebook did not publicly acknowledge that users' data had been improperly accessed when it became aware in 2015 that Kogan had accessed data from consenting users' friends' profiles and passed user data to CA. A company vice president tweeted, "This was unequivocally not a data breach. People chose to share their data with third party apps." In 2014, third-party developers were allowed under Facebook's Platform Policy to collect data on consenting users' friends, but only to improve the app or for research. Users could opt out of allowing their data to be collected under the Platform Policy by changing their settings, thereby forfeiting the ability to use third-party apps.

Days of Silence

On March 16, 2018, Facebook asserted that Kogan had violated their rules by giving CA the data. In 2015, Facebook had removed Kogan's app from the platform and demanded that he, CA, and SCL delete the data, which the parties certified to Facebook that they did. When Facebook learned that Kogan, CA, SCL, and Wylie still retained some of the data in March 2018, the company suspended their Facebook accounts. CA blamed Kogan, claiming their contract specified that he obtain users' informed consent for the project.

On March 19, 2018, Facebook's stock dropped 4%, losing approximately \$23.8 billion in market value. The next day, Facebook held its regular Tuesday town hall meeting for employees, led by its deputy general counsel. The topic was CA and the details of Kogan's data harvesting. Zuckerberg and Sandberg did not attend.

On March 21, 2018, Zuckerberg posted about the incident on his Facebook page: "We have a responsibility to protect your data." He outlined actions to mitigate this type of incident in the future, including banning collection of data from consenting users' friends; auditing apps that accessed large amounts of information; placing additional restrictions on developers' access to user data, and making it easier for users to revoke permission from specific apps. That day, Zuckerberg said on CNN, "This was a major breach of trust, and I'm really sorry that this happened. [...] Our responsibility now is to make sure this doesn't happen again." He indicated he was willing to testify before Congress and supported the possibility of regulation.

Following the *Observer* story, Democratic Senator Amy Klobuchar of Minnesota demanded that Zuckerberg testify before Congress, tweeting, “Facebook breach: This is a major breach that must be investigated. It’s clear these platforms can’t police themselves. I’ve called for more transparency & accountability for online political ads. They say ‘trust us.’” Klobuchar and Republican Senator John Kennedy called on the Judiciary Committee to invite Zuckerberg to testify, “Facebook, Google, and Twitter have amassed unprecedented amounts of personal data and use this data when selling advertising, including political advertisements. [. . .] The lack of oversight on how data is stored and how political advertisements are sold raises concerns about the integrity of American elections as well as privacy rights.” “Wanton theft and chilling privacy invasion require immediate Congressional hearings – and action,” wrote Connecticut Democratic Senator Richard Blumenthal.

Dozens of other public figures spoke out in a similar manner. On March 21, 2018, WhatsApp co-founder Brian Acton, who left Facebook after his company was acquired, tweeted, “It is time. #deletefacebook,” helping to spark a social-media campaign to stop using the platform. Facebook’s executive in charge of security, who had previously spoken out about privacy concerns and the company’s role in disseminating fake news, left the company.

Zuckerberg Testifies

On March 23, the House of Representatives invited Zuckerberg to testify and the British Information Commissioner’s Office raided CA’s London offices. On March 26, the Senate joined the House in asking Zuckerberg to speak before the Judiciary Committee, and the FTC confirmed it was investigating Facebook’s handling of user data. Prior to his testimony, Zuckerberg announced Facebook would begin requiring verification of the identity and location of parties posting political or issue-based advertisements and parties operating large pages. Facebook would also label political ads, and advertisers would have to disclose their sources of funding. Zuckerberg claimed that verifying the people who manage large pages “will make it much harder for people to run pages using fake accounts, or to grow virally and spread misinformation or divisive content,” as Russian interests allegedly had in 2016. Zuckerberg also stated that the company supported regulatory legislation, mentioning the proposed Honest Ads Act specifically.

On April 10 and 11, Zuckerberg spent 10 hours answering questions from nearly 100 members of Congress. Questions ranged from Facebook’s handling of user data to the actions of Russia during the 2016 election cycle; whether the site helped propagate misleading news stories (“fake news”) or displayed political bias; if it was a media company and publisher or a technology platform; whether it was a monopoly; and if and how it ought to be regulated.

Zuckerberg told Senator John Cornyn, “There’s a very common misperception about Facebook – that we sell data to advertisers. And we do not sell data to advertisers. We don’t sell data to anyone.” When pressed on whether users should have the opportunity to give informed consent, Zuckerberg avoided the question. Later he admitted, “Do we have a responsibility for the content people share on Facebook? I think the answer to that question is yes.”

Zuckerberg admitted that regulation of Facebook and other companies’ with access to user data was “inevitable.” Democratic Senator Mark Warner of Virginia proposed the Honest Ads Act to subject online political advertising to the same disclosure and transparency rules that regulated print and broadcast media advertising.

An April 12–13, 2018 poll reflected the erosion of trust in Facebook: 83% of respondents thought there was a need for “tougher regulations and penalties for breaches of data privacy,” while 88% agreed that Facebook specifically should be either heavily or lightly regulated, and 67% believed laws ought to be passed requiring companies to “get their users explicit opt-in consent anytime personal information is used, shared, or sold.”

Apple’s Tim Cook Voices An Opposing View

In an April 6, 2018 interview, Apple CEO Tim Cook, in response to a question about how he would respond if he were CEO of Facebook, said, “I wouldn’t be in this situation.” [. . .] I think the best regulation is no regulation, is self-regulation. However, I think we’re beyond that here.”

Earlier, on March 24, he had said: “[T]his certain situation is so dire and has become so large that probably some well-crafted regulation is necessary.”

Apple and Facebook had fundamentally different approaches to treating user data. In 2015, Cook had said of Facebook and other rivals, including Google. “Prominent and successful companies have built their businesses by lulling their customers into complacency about their personal information. They’re gobbling up everything they can learn about you and trying to monetize it. We think that’s wrong. And it’s not the kind of company that Apple wants to be.” Cook was echoing the views of his predecessor, Apple co-founder Steve Jobs, who in 2010 said, “Privacy means people know what they’re signing up for—in plain English, and repeatedly.”

Whereas Facebook and Google made a significant percentage of their revenues from selling ads based on collection and analysis of user data, Apple made the bulk of its money by selling hardware. “The truth is, we could make a ton of money if we monetized our customer—if our customer was our product. We’ve elected not to do that,” said Cook. On April 2, Zuckerberg stated that Cook’s view was “extremely glib and not at all aligned with the truth,” and continued, “We are squarely in the camp of the companies that work hard to charge you less and provide a free service that everyone can use.”

Europe Steps Up its Regulations

On May 25, 2018, the General Data Protection Regulation (GDPR), the EU’s sweeping new regulations governing use of data went into effect. GDPR was designed to align EU nations’ disparate regulations and give users more control over their data. GDPR required entities that controlled or processed individuals’ data to obtain informed consent *before* collecting and using their data. Under GDPR, individuals had greater ability to access their data and could retroactively withdraw their consent and demand that entities in possession of their data delete it. In addition, companies had to document data collection and state how long data was held, as well as to disclose when data was lost, changed, or improperly accessed or disclosed. EU and national regulators had the right to fine companies that violated GDPR €10 million to € 20 million, or 2% to 4% of revenues. Goldman Sachs predicted that GDPR would reduce Facebook’s revenue in Europe by 7%.

Looking Ahead

In the first quarter of 2018, Facebook reported quarterly net income of \$5 billion, up from \$3 billion in 1Q2017. As of April 2018, Facebook had 2.2 billion users, having gained 70 million users over the previous 12 months. Since the scandal, Facebook had begun making the changes to its data-handling policies Zuckerberg had promised in his statements and testimony, along with others.

Nevertheless, many users were questioning whether they could trust Facebook—or any big company—with their personal data. Would the public backlash continue? Should Facebook be worried about the future of its ad-based business model? What could it do to better secure data, give users more control, or otherwise minimize risks to users and allay their concerns? Was it time to ask users explicitly to “opt out” or “opt in” to sharing their data with third parties?

Since virtually all companies were confronting similar issues, especially Facebook’s competitors, Zuckerberg had to decide whether to wait for government policies to set data-handling standards for all companies, or take a leadership role on issues of data privacy.

Exhibit 1 History of Notable Zuckerberg Apologies, 2003 to 2017

Date	Context	Key Zuckerberg Quote
November 2003	Zuckerberg apologized for Facebook-predecessor Facemash, which let Harvard students rate each other's looks	"I apologize for any harm done as a result of my neglect to consider how quickly the site would spread and its consequences thereafter."
September 2006	News Feed, a new feature, showed users activities of one another's friends	"We really messed this one up. [. . .] Somehow we missed this point with News Feed and Mini-Feed and we didn't build in the proper privacy controls right away. This was a big mistake on our part, and I'm sorry for it."
December 2007	Beacon automatically informed members' contacts about their activities on third-party sites	"We've made a lot of mistakes building this feature, but we've made even more with how we've handled them."
May 2010	Zuckerberg published an op-ed in the <i>Washington Post</i> in response to reporting that Facebook and other social media sites "divulge unique user IDs to advertisers, which can be used to track consumers," according to reports	"The biggest message we have heard recently is that people want easier control over their information. [. . .] We just missed the mark."
November 2016	Facebook was implicated in the allegations that Russia interfered in the 2016 U.S. elections	"The idea that fake news on Facebook, of which it's a very small amount of the content, influenced the election in any way is a pretty crazy idea."
February 2017	Zuckerberg admitted Facebook may not sufficiently monitor and regulate content on its platform	"This has been painful for me because I often agree with those criticizing us that we're making mistakes."
September 2017	Zuckerberg revised earlier comments amid pressure over Russian use of Facebook to interfere in the U.S. election	"Calling that crazy was dismissive and I regret it. This is too important an issue to be dismissive."
September 2017	On Jewish holiday of Yom Kippur, which focuses on repentance, Zuckerberg issues another public apology	"For those I hurt this year, I ask forgiveness and I will try to be better. For the ways my work was used to divide people rather than bring us together, I ask for forgiveness and I will work to do better."

Exhibit 2 Facebook Ad Targeting, 2007-2014

Year	Data Used	Example Target Profile
2007	Only information volunteered by users on Facebook	"Anyone who lives in Philadelphia, studies philosophy in college and is 18 to 22."
2009	Incorporated user "likes" into data sets for advertisers and allowed advertisers to target by age and to target friends of users who had interacted with their brands	"Anyone who lives in Philadelphia, studies philosophy in college and is 21."
2012	Advertisers allowed to upload and target their own lists of users, e.g., drawn from their own customer lists or lists purchased from other entities, such as data brokers	"Anyone who lives in Philadelphia, studies philosophy in college, is 21 and has bought a blue T-shirt in the past year."
2013	Combined data from data brokers with Facebook target profiles to specify user personality traits	"Anyone who lives in Philadelphia, studies philosophy in college, is 21, has bought a blue T-shirt in the past year and is neurotic."
2014	More precise targeting introduced as Facebook incorporated hundreds of categories of data from data brokers into their built-in targeting tools	"Anyone who lives in Philadelphia, studies philosophy in college, is 21, has bought a blue T-shirt in the past year, is neurotic, makes less than \$28,000 a year and is likely to buy a minivan in the next six months."
2014	Advertisers allowed to target "lookalikes," i.e., users whose profiles and behaviors resembled those of individuals identified in advertiser lists	"Anyone who lives in Philadelphia, studies philosophy in college, is 21, has bought a blue T-shirt in the past year, is neurotic, makes less than \$28,000 a year and is likely to buy a minivan in the next six months. Plus, anyone on Facebook who is similar to them."
2014	Added users' browsing history, collected via Facebook "like" buttons on outside pages or when users logged into outside pages using Facebook	"Anyone who lives in Philadelphia, studies philosophy in college, is 21, has bought a blue T-shirt in the past year, is neurotic, makes less than \$28,000 a year, is likely to buy a minivan in the next six months and is interested in camping. Plus, anyone on Facebook who is similar to them."
2014	Added ethnic identifiers inferred from Facebook content and user behavior	"Anyone who lives in Philadelphia, studies philosophy in college, is 21, has bought a blue T-shirt in the past year, is neurotic, makes less than \$28,000 a year, is likely to buy a minivan in the next six months, is interested in camping and whose interests align with those of African-Americans. Plus, anyone on Facebook who is similar to them."