Mark Zuckerberg PlainSite

Reality Check

Facebook, Inc.

NASDAQ: FB January 24, 2019

Follow Mark to get his public posts in your News Feed. 6 6 6 7 104,099,602 Followers Overview Work and Education Works at Facebook and Chan Initiative Places He's Lived Contact and Basic Info Studied Computer science at Ha University Family and Relationships Past: Phillips Exeter Academy and Aro School Details About Mark Life Events

Timeline

Mark Zuckerberg 🥥

About

Friends

Lives in Palo Alto, California From Dobbs Ferry, New York

Author

Aaron Greenspan

Disclosures

Aaron Greenspan owns FB put options in his personal capacity. He entered into a confidential settlement with Mark Zuckerberg and Facebook, Inc. in 2009.

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Executive Summary

On paper, Facebook, Inc. (NASDAQ: FB) is one of the most successful companies in history. With a market capitalization that peaked at over \$600 billion, Facebook has



been the envy of blue chip executives, entrepreneurs, and venture capitalists since it exploded onto the global stage. Facebook claims to have over 2 billion Monthly Active Users (MAUs), to a large extent determines which media outlets live and die, connects friends and family members across continents, and is nearly its own sovereign nation.

What seems too good to be true often is. The *zeitgeist* has changed markedly since 2007, when the company was the obsession of virtually every Silicon Valley investor, having built its Platform to make the world "more open and connected." Yet as bad as things have been of late for

Facebook, with endless privacy breaches and Russian interference in the 2016 presidential election hanging over Menlo Park like a spectre, we believe that the situation is far worse than investors realize. Facebook has been lying to the public about the scale of its problem with fake accounts, which likely exceed 50% of its network. Its official metrics—many of which it has stopped reporting quarterly—are self-contradictory and even farcical. The company has lost control of its own product.

Fake accounts affect Facebook at its core in numerous ways:

- Its customers purchase advertising on Facebook based on the fact that it can supposedly target advertisements at more than 2 billion real human beings. To the extent that users aren't real, companies are throwing their money down the drain.
- Fake accounts click on advertising at random, or "like" pages, to throw off antifraud algorithms. Fake accounts look real if they do not follow a clear pattern. This kind of activity defrauds advertisers, but rewards Facebook with revenue.
- Fake accounts often defraud other users on Facebook, through scams, fake news, extortion, and other forms of deception. Often, they can involve governments.

Preaching that programmers should "move fast and break things," CEO Mark Zuckerberg has clarified over time that growth at any cost is his only priority. But documents recently revealed show that since 2012, management has worried about where it can find more warm bodies to sign on. Fake accounts have been keeping the company that Columbia professor Tim Wu has called an "attention merchant" afloat.

The cost of Zuckerberg's dissembling, dating all the way back to 2004, has accrued, and is finally coming due. Accordingly, it is increasingly likely that Facebook will go the way of AOL, CompuServe, and Prodigy—if legal liability doesn't bankrupt it first.

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Introduction

The Facebook company legend goes something like this: in a moment of divine inspiration, Mark Zuckerberg, a genius Harvard student, created Facebook in his dorm room in Kirkland House in 2004 as a cool project. It was even more popular than his previous project, which had temporarily shut down Harvard's network, and before long, a third of the world's population was using it. Along the way, Mark and his newly rich friends ate koala meat on a yacht, attracted groupies, and became Hollywood celebrities. Today, everyone is "more open and connected" in a single giant community.

That legend, like many legends, is completely false. Mark Zuckerberg is by no objective measure a genius. A digital, campus-wide product called "The Facebook" actually started in Lowell House in 2003, not Kirkland House in 2004. The Harvard network never shut down on account of anything Mark did. His controversial creation, Facemash, only attracted "450 visitors," despite a major motion picture emphasizing the misleading number "22,000."² The yacht story has been verified by no one, and the yacht may not have existed at all.³ And though it took almost a decade and a half, Facebook, Inc. is today grappling with deeply concerning issues stemming from its founder's self-serving, extremist philosophy of radical transparency, not to mention a press tired of the company's constant lies and charades.

The role of the media has always been fundamentally intertwined with Facebook's success, and with scandals surfacing weekly, reporters have long since moved past Facebook's origins. Even governments worldwide are beginning to express their chagrin. By the end of this report, it should be clear why the truth about what happened at Harvard over a decade ago still matters, perhaps more than ever. It should also be evident that Facebook's deception goes back so far and is so pervasive that cataloguing its full scope is nearly impossible. Not only is there too much content to fit on a reasonable number of pages, but the company's political clout would surely end such an endeavor in the mainstream media before it even began. The truth is that at this point, Mark Zuckerberg may in fact be the greatest con man in history, having pulled off a complex fraud at one point valued at approximately ten times the scale of convicted financier Bernard Madoff's historic and epic Ponzi scheme.⁴

The author of this report is in the strange position of trying to write objectively about a topic to which he has personal ties. Readers are accordingly welcome to dismiss this analysis as biased, but should be aware that nonetheless, it may still be correct.

The Harvard Crimson, December 11, 2003, "Put Online a Happy Face."

https://www.thecrimson.com/article/2003/12/11/put-online-a-happy-face-after/

With two photographs to a page for comparison and 450 users, each user would have viewed about 24 comparisons 2 on average, assuming none of the hits were Mark Zuckerberg himself testing the site. 3

The Guardian, July 4, 2009, "A sexy saga of Facebook's birth - but is it fantasy?"

https://www.theguardian.com/books/2009/jul/05/facebook-accidental-billionaires-zuckerberg Reuters, March 11, 2009, "Madoff mysteries remain as he nears guilty plea."

https://www.reuters.com/article/us-madoff/madoff-mysteries-remain-as-he-nears-guilty-plea-idUSTRE52A5|K20090311

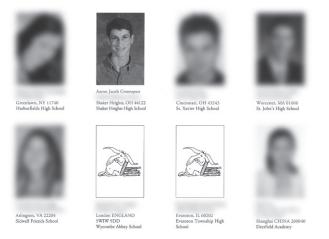
Corporate History

Every Tub On Its Own Bottom

The structure of Harvard College, one of Harvard University's many schools, is in large part responsible for the existence of Facebook, Inc. With 15 separate schools and



Left: The cover of the Harvard College Class of 2005 Freshman Register, issued September 2001. This bound book was often referred to as "The Face Book," with or without a space. Right: The paperback deep sky blue Lowell House Facebook (not pictured), matching the paint color of the house's doors and iconic belltower dome, also arrived with an addendum in the spring of 2003 that explicitly used the word "Facebook."



An excerpt from a page of the Freshman Register. The Register provided relatively little detail about each student: a black-and-white photograph (if provided by the student), the student's full name, home address, and high school. Students spent many hours poring over their new classmates' photographs. countless departments, centers, buildings, and initiatives, Harvard is famously decentralized—a fact that manifests in a form of institutional pride through the saying "every tub on its own bottom." According to a 2002 Harvard Crimson article,

"First penned by John Bunyan in his 1678 allegory Pilgrim's Progress, 'every tub' was borrowed by Harvard President John T. Kirkland during the first quarter of the 19th century when critics pressed him to find a location to build up the Divinity School. In response, Kirkland declared, 'It is our rule here for every tub to stand on its own bottom.' He meant that each school

of the University was an independent entity, responsible for its own management and funding."⁵

Nearly 200 years later, this principle of institutional independence would be the source of considerable friction within the Harvard community, causing various impediments from obstacles to cross-registration between schools, to budgetary issues, to problems with physical access to dorms.

Even within Harvard College, dorm life is modeled after the British university system, and comprises a confederation of dorms for freshmen and "houses" for upperclassmen, much like the considerably more famous houses of the

⁵ The Harvard Crimson: Fifteen Minutes, October 24, 2002, "Harvard Explained."

http://www.thecrimson.com/article/2002/10/24/harvard-explained-where-does-the-phrase/



An excerpt from the still bare-bones, black-andwhite, 2002 paperback Lowell House Facebook.

Harry Potter universe, such as Gryffindor. Harvard's houses were once identified with certain qualities attributable to their inhabitants: thespians and athletes in Adams with its pool and stage,⁶ "heavily Asian" Quincy, "heavily black" Quad houses⁷ (where the Harvard administration also once exiled Jews), etc. Today a computer randomly assigns students to their living quarters, but the house system lives on.⁸

In 2003, after the dot-com boom but just before the widespread adoption of wireless networks (and well before the invention of smartphones), each house had its own website, and each house website featured its own "Face Book" or "Facebook," modeled after the paper copies distributed to

students.⁹ Access to each house Facebook was restricted in different ways, depending upon the house. Some required a username and password; others required an IP address within the house to gain access, meaning that one had to be physically present in that location. Wireless ethernet (wi-fi) did not yet exist on campus.

Harvard's paper Facebook was just one of a hundred small booklets, brochures and pamphlets handed out at the beginning of the year in an attempt by the administration to explicate the vastness of the Harvard community to students, but it was uniquely important amongst all of the other literature for three reasons: it contained pictures, the pictures were generally of the students that one would meet and interact with on a daily basis, and for the upperclass house editions, it contained phone numbers.

houseSYSTEM

Thanks to a donor gift, by 2001 Harvard's former Division of Engineering and Applied Sciences (DEAS) contained within it an endowed center devoted to entrepreneurship called the Technology and Entrepreneurship Center at Harvard (TECH). The interest from the TECH endowment paid for the salary of its administrator, a former patent attorney named Paul Bottino, with the residual allocated to its student group, the TECH Student Association. These crucial details were conveniently omitted from the narrative offered up to prospective Harvard freshmen, who were simply told that Harvard had millions of dollars it wanted



them to spend on technology and entrepreneurship. The actual amount was closer to \$2,000.

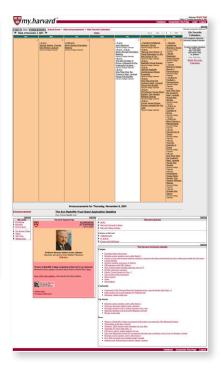
⁶ Adams House History. https://adamshouse.harvard.edu/house-history

⁷ Harvard Magazine, December 2001, "Housing after Randomization." https://harvardmagazine.com/2001/11/housing-after-randomizat.html

⁸ A recent edition of the Unofficial Guide to Harvard refers to Kirkland House with the opening sentence, "Mark Zuckerberg lived here at one point, but that whole shtick is getting kind of old."

⁹ Ironically, illustrating students' dilemma, since the author of this report was a member of the Class of 2005 and Mark Zuckerberg was in the Class of 2006, at the time of publication he did not have access to a paper facebook with Mark's picture in it. Similarly, Mark lived in Kirkland House, with a paper facebook separate from that of Lowell House.





Left: A screenshot of the houseSYSTEM home page for Harvard Yard as of March 2004. Each residential house had its own houseSYSTEM home page and URL. From September 2003 (one month after launch) through March 2004, the "FaceNet" icon read "Face Book." Right: A screenshot of the official my.harvard student portal home page as of 2001. Visually, it remained a collection of boxes through at least 2004.



The logo of the

now-defunct

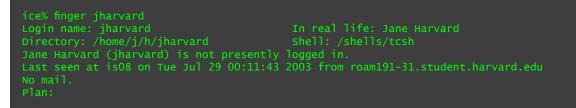
Harvard SEC.

In 2003, the author of this report was elected President of the TECH Student Association. Seeking a fresh start given the group's long history of mismanagement, the club promptly changed its name to the Harvard Student Entrepreneurship Council, adopted a new logo as well, and attempted to revive interest in entrepreneurship on campus despite the overhang of the dot-com crash. As an analog for startup life—and copying the model of the long-established student group, Harvard Student Agencies—the club began working on its own student-led software project assembled from pieces that had been spurned or ignored by other student groups.¹⁰ Together, they formed an unofficial student portal to unite the campus called houseSYSTEM.

houseSYSTEM offered students an alternative to the Harvard administration's "my. harvard" portal, a haphazard collection of "modules"—really just boxes that pulled in content from other University websites—generally regarded as clunky and essentially useless. Even with my.harvard, in 2002 the University still offered no way to check e-mail without signing into a UNIX shell account, and required almost all of its bureaucratic requirements to be fulfilled using Scantron sheets or carbon paper.

UNIX did provide students with one popular feature, however: the finger command, widely used to discover the whereabouts of other students on campus. Since Harvard used static IP addresses for its computers at the time, a student's last-used IP

¹⁰ In February 2002, the Harvard Computer Society's new President, Ami Vora, wrote by e-mail that "The HCS is recovering from major problems...and virtually disappeared for a year." She summarized the situation with, "I've been president for all of three weeks, and my current job is to make the HCS cool again. Okay, the HCS never was cool and it never will be, but I'd settle for making the HCS exist again." She expressed disdain for features average students would find helpful, writing, "because we try to be at least nominally hardcore techie, webmail is a Thing to be Despised." In 2007, Vora went on to work for Facebook, Inc., ultimately assuming titles including Vice President of Ads and later, Product.



Example finger command output from ice.fas.harvard.edu in 2003. Simply put, students used finger to stalk one another.



houseSYSTEM integrated a number of features, including a class scheduler for "shopping period," intended to help the administration solve the problem of gauging student interest in courses; a textbook exchange, and The Facebook, later FaceNet. Harvard initially reacted to the site with a zealous campaign to shut it down and punish its backers. address could provide information on where they had last checked their e-mail.

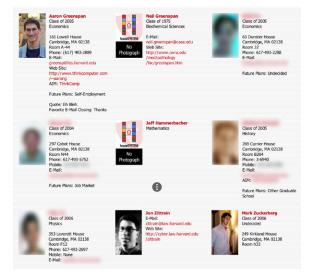
houseSYSTEM was designed and programmed entirely by this report's author. An e-mail sent to beta testers on July 25, 2003 referenced an "Enhanced face book system" as a feature in development. The site officially launched on August I, 2003 with a Flash trailer set to Spider-Man music, but without the Facebook feature.¹¹ The main attraction was the course calendar, capable of handling conflicting courses for students who wanted to try a variety of options for one time slot during "shopping period." houseSYSTEM also featured CriticalMass to review courses, Student Exchange to buy and sell textbooks and other items, digital posters to advertise events, a calendar with digital RSVP functionality, e-mail birthday reminders, and a photo album in the very early stages of development.

On August 9, 2003, the author of this report wrote to another student active in the SEC asking, "I finally figured out how to get ImageMagick 5.5.7 installed. It's now in /usr/local/ imagemagick on the server. Are you around and/or up for writing some code for the facebook?" He never received a response, and proceeded to write the code himself, including a basic set of privacy controls in houseSYSTEM's My Account section that allowed users to turn the visibility of specific fields on or off. Another feature designed to let student groups communicate on their own dedicated pages was still in progress.

Given that houseSYSTEM was all about integrating the difference aspects of student life in a seamless manner—such as by featuring links to the textbooks for sale from Student

Exchange for a given course reviewed on CriticalMass—social networking features were conspicuously absent. It would have been easy, for example, to create course

¹¹ Greenspan, Aaron, Authoritas Interbook Resources, Think Press (2008). http://www.thinkpress.com/authoritas/housesystem/trailer.html



An excerpt from The Facebook on houseSYSTEM in 2003. In addition to Mark Zuckerberg (whose name caused his entry to be displayed last alphabetically), future Facebook, Inc. data team lead Jeff Hammerbacher was also a member. So was Harvard Law professor Jonathan Zittrain, who would later take grant money from Facebook, Inc. after writing a book warning against corporate lock-in on the internet.

rosters based on submitted reviews and photographs from the houseSYSTEM Facebook, but the Harvard administration had made it extremely clear to the SEC that its existence was already tenuous and that its leaders could face immediate disciplinary action for anything that might even be perceived as violating students' privacy rights or Harvard's intellectual property rights. In this context, building a social network similar to Friendster sounded like a one-way ticket out of Cambridge.

After launch, even with some students making remarks such as, "That new thing at harvardsec. org looks cool," it only took one day before the site's legitimacy was called into question by a small handful of vocal students, alumni, and Lowell House's official webmaster, who spun a public conspiracy theory about houseSYSTEM's e-mail server integration—which finally provided a webbased e-mail solution—being potentially used to

trick students into offering up their passwords to a fellow student.¹² In fact, houseSYSTEM did not store passwords in plain text and none were compromised. School administrators weighed in nonetheless, threatening disciplinary action while refusing to review the site's source code even when given the chance. *The Crimson* covered the controversy,¹³ placing houseSYSTEM in a negative light from the start. The allegations were completely meritless. After weeks of pointed debate and the involvement of several attorneys, the site was allowed to stay up provided that all of its members reset their Harvard Faculty of Arts and Sciences (FAS) passwords. This resulted in additional negative publicity and rumors of wrongdoing. Ironically, these concerns about password disclosure were reasonable, but with regard to a completely different person and a completely different site that did not yet exist.

As part of these intense discussions, Lowell House Allston Burr Senior Tutor and Administrative Board member John "Jay" Ellison warned on August 20, 2003, "The SEC's intention to link to House facebooks or otherwise publish identifying information about students raises separate concerns about student privacy."¹⁴ Roughly a week later, on August 28, 2003, he again issued a warning as part of the Harvard administration's campaign against houseSYSTEM:

"As for the proposed face book, the College will not permit the SEC to post on your site

¹² Greenspan, Aaron, Authoritas: One Student's Harvard Admissions and the Founding of the Facebook Era. Think Press (2008). https://www.amazon.com/Authoritas-Students-Admissions-Founding-Facebook/dp/1606690000

¹³ The Harvard Crimson, August 8, 2003, "Student Site Stirs Controversy."

https://www.thecrimson.com/article/2003/8/8/student-site-stirs-controversy-a-sharp/ 4 Greenspan, Aaron, Authoritas Interbook Resources, Think Press (2008).

https://www.thinkpress.com/authoritas/housesystem/20030820095943.ellison.pdf

information that it collects or maintains about students. Federal law imposes strict obligations on the College with regard to the dissemination of student information, including names, addresses, phone numbers and photographs. The College therefore will not release information of this kind to you, or to any other student group for that matter, even with students' consent. I should also remind you that it is a violation of College rules to gather such data from a Harvard source and recompile it in any form. You cannot, therefore, simply take information from house facebooks and post it on your site. If you have specific questions about this issue, please feel free to contact me."

Since the administration's restrictions were so overbearing verging on absurd,^{15,16} the SEC proceeded to continue with houseSYSTEM's development anyway.

On September 19, 2003, the houseSYSTEM Universal Face Book, also referred to as "The Facebook" in several e-mails, finally launched. To placate Ellison and his colleagues in University Hall, The Facebook required houseSYSTEM members to specifically opt-in in order to avoid any confusion about what they had signed up for. Most students were too busy with their work to notice. About 100 signed up.

Harvard Connection

On November 12, 2003, with no written contract or payment up front (or at all), Mark Zuckerberg agreed to do freelance programming work for Cameron and Tyler Winklevoss and their friend Divya Narendra, who were working on a dating site first called Harvard Connection and later called ConnectU.¹⁷ By December, Mark was dragging his heels and failing to produce much, proffering excuses ranging from "It turns out I forgot to bring my charger home with me for Thanksgiving"¹⁸ to "I was working on a problem set and I had my phone silenced in my pocket the whole time."¹⁹

Harvard Connection was literally (on its home page) and conceptually divided into two main sections: "date" and "connect." According to *02138 Magazine* (no longer in print), "Half the network would be a dating section, where Harvard students could upload profiles. The other half would help make connections, whether to look for jobs, swap information about classes, or just hang out online. There was even a way users could connect with each other."²⁰ The former section was slated to have a

¹⁵ On December 14, 2003, the author informed Harvard Arts and Sciences Computer Services (HASCS) that several of the official Harvard house facebook sites had been exposing every resident student's Harvard ID. None used SSL, including the site designed and maintained by the Lowell House webmaster who had protested houseSYSTEM's security.

¹⁶ One of Jay Ellison's formal criticisms of houseSYSTEM was the harmless use of the word "the" in a copyright notice, which the University itself used on its own sites.

¹⁷ *ConnectU LLC v. Zuckerberg et al*, Massachusetts District Court, Case No. 1:04-cv-11923-DPW, Document 1. https://www.plainsite.org/dockets/download.html?id=5170096&z=51930a34

¹⁸ ConnectU, Inc. v. Facebook, Inc. et al, Massachusetts District Court, Case No. 1:07-cv-10593-DPW, Document 68-36. https://www.plainsite.org/dockets/download.html?id=23144533&a=36&z=0ba6e5a4

¹⁹ ConnectU, Inc. v. Facebook, Inc. et al, Massachusetts District Court, Case No. 1:07-cv-10593-DPW, Document 68-37. https://www.plainsite.org/dockets/download.html?id=23144533&a=37&z=0ba6e5a4

^{20 02138} Magazine, Re-Published by Information Liberation, December 3, 2007, "Poking Facebook."



Just after Mark Zuckerberg was hired on November 18, 2003, the entirety of the Harvard Connection home page bore little resemblance to a student directory and had no functional links.

directory of nightclubs and corresponding guest lists. Not much evidence exists of work done on the latter. The twins planned to market the site with T-shirts, flyers, business cards, and a launch party.²¹ Although they had considered expanding to other schools as a "dating/alumni site" as early as December 2003,²² Mark was generally unimpressed with their plans.

According to *Business Insider*, on December 7, 2003, with the technically clueless and shockingly tasteless²³ twins desperate for project status updates and working code so that they could meet their January target launch date,²⁴ Mark (zberg02 on AOL Instant Messenger, or AIM) sent an Instant Message (IM) to his friend Eduardo Saverin, then president of the Harvard Investment Society:²⁵

zberg02: Check this site out: www.harvardconnection.com and then go to harvardconnection.com/datehome.php. Someone is already trying to make a dating site. But they made a mistake haha. They asked me to make it for them. So I'm like delaying it so it won't be ready until after the facebook thing comes out.

Two days later, on December 9, 2003, *The Crimson* published an article by David Kaden entitled, "College Inches Toward Campus-Wide Facebook," with the sub-head-ing, "Time frame for completion of online directory still uncertain."²⁶ The article omitted any reference to the houseSYSTEM Facebook, which was already open campus-wide, but cited Zuckerberg, stating:

"The development of a campus-wide facebook had previously been stalled by privacy concerns, many of which came to a head last month when Mark E. Zuckerberg '06 was accused of breaching security and violating copyrights and individual privacy.

http://www.informationliberation.com/?id=24402

²¹ ConnectU, Inc. v. Facebook, Inc. et al, Massachusetts District Court, Case No. 1:07-cv-10593-DPW, Document 68-20. https://www.plainsite.org/dockets/download.html?id=23144533&a=20&z=0ba6e5a4

²² ConnectU, Inc. v. Facebook, Inc. et al, Massachusetts District Court, Case No. 1:07-cv-10593-DPW, Document 68-92. https://www.plainsite.org/dockets/download.html?id=23144533&a=92&z=0ba6e5a4

²³ In e-mails, Cameron Winklevoss repeatedly emphasized his main idea: an inter-personal index called an "incest rating."

²⁴ January marked the beginning of Harvard's intersession, a study/break period between fall and spring semesters.

²⁵ Business Insider, May 17, 2012, "EXCLUSIVE: Mark Zuckerberg's Secret IMs From College."

https://www.businessinsider.com/exclusive-mark-zuckerbergs-secret-ims-from-college-2012-5 26 The Harvard Crimson, December 9, 2003, "College Inches Toward Campus-Wide Facebook."

²⁶ The Harvara Crimson, December 9, 2003, College Inches Toward Campus-Wide Facebook. https://www.thecrimson.com/article/2003/12/9/college-inches-toward-campus-wide-facebook-students/



AOL Instant Messenger played a vital role in the Facebook saga. In addition to conveying countless key conversations, both Mark Zuckerberg and Adam D'Angelo were fascinated by AIM's technology and network of users. D'Angelo would become Facebook's first Chief Technology Officer.



A sample image from Adam D'Angelo's previous project at CalTech, BuddyZoo, which produced network graphs based upon AIM Buddy Lists. Its features, e.g. "Find out which buddies you have in common with your friends" and "Measure how popular you are," were fundamental to Facebook's success, and are often incorrectly attributed to Mark Zuckerberg. Zuckerberg created a website, www.facemash.com, that used identification pictures obtained illicitly from House-based facebooks to rate students' attractiveness."

Naturally, with the campus newspaper discussing his previous, if unauthorized, work, Zuckerberg noted the article. Aside from Facemash, he clearly had an interest in building better on-line tools for students, such as CourseMatch, which he had launched in September 2003 with little fanfare. But before he decided to build the campus-wide Facebook that he had mentioned to Saverin and now *The Crimson* was implicitly calling—and by December 11th, practically begging²⁷ for, there was someone he wanted to speak with first: a student who had e-mailed him after seeing CourseMatch, and who had built one already, on houseSYSTEM.

The Dinner Meeting

According to AIM conversations also obtained by *Business Insider*, Mark had a conversation with Adam D'Angelo (a2mdmda) about how to handle the obvious conflict between his client's interests and his own.

zberg02: So you know how I'm making that dating site

zberg02: I wonder how similar that is to the Facebook thing

zberg02: Because they're probably going to be released around the same time

zberg02: Unless I fuck the dating site people over and quit on them right before I told them I'd have it done.

a2mdmda: haha

zberg02: Like I don't think people would sign up for the facebook thing if they knew it was for dating

zberg02: and I think people are skeptical about joining dating things too.

zberg02: But the guy doing the dating thing is going to promote it pretty well.

zberg02: I wonder what the ideal solution is.

zberg02: I think the Facebook thing by itself would draw many people, unless it were released at the same time as the dating thing.

zberg02: In which case both things would cancel each other out and nothing would win. Any ideas? Like is there a good way to consolidate the two.

a2mdmda: We could make it into a whole network like a friendster. haha. Stanford has something like that internally

²⁷ The Harvard Crimson, December 11, 2003, "Put Online a Happy Face."

https://www.thecrimson.com/article/2003/12/11/put-online-a-happy-face-after/

zberg02: Well I was thinking of doing that for the facebook. The only thing that's different about theirs is that you like request dates with people or connections with the facebook you don't do that via the system.

a2mdmda: Yeah

zberg02: I also hate the fact that I'm doing it for other people haha. Like I hate working under other people. I feel like the right thing to do is finish the facebook and wait until the last day before I'm supposed to have their thing ready and then be like "look yours isn't as good as this so if you want to join mine you can...otherwise I can help you with yours later." Or do you think that's too dick?

a2mdmda: I think you should just ditch them

zberg02: The thing is they have a programmer who could finish their thing and they have money to pour into advertising and stuff. Oh wait I have money too. My friend who wants to sponsor this is head of the investment society. Apparently insider trading isn't illegal in Brazil so he's rich lol.

a2mdmda: lol

On January 6, 2004 at 6:19 A.M., Mark Zuckerberg sent the author of this report an e-mail²⁸:

"I was thinking of making a web app that would use the Harvard course catalog, but I'm a little worried about the university getting upset after the whole facemash episode. I know you used info from the catalog in your shopping list scheduler in housesystem (which is awesome by the way), so I was wondering if you had to get permission to use that material and if so, whom you contacted. Or maybe if you didn't ask permission but you think I should for extra precaution, do you have any idea whom I could ask?

Thanks a lot!"

Four minutes later, Mark Zuckerberg signed up for the houseSYSTEM Facebook.

Two days after that, early in the morning at 5:58 A.M., Mark sent an e-mail to Cameron Winklevoss affirming that the Harvard Connection code would be ready soon:²⁹

"Sorry it's taken a while for me to get back to you. I'm completely swamped with work this week. I have three programming projects and a final paper due by Monday, as well as a couple of problem sets due Friday. I'll be available to discuss the site again starting Tuesday."³⁰

For good measure, he expressed concerns about "bandwidth" and "image optimiza-

²⁸ Greenspan, Aaron, *Authoritas* Interbook Resources, Think Press (2008).

https://www.thinkpress.com/authoritas/housesystem/20040106061911.zuckerberg.pdf

²⁹ ConnectU, Inc. v. Facebook, Inc. et al, Massachusetts District Court, Case No. 1:07-cv-10593-DPW, Document 68-31.

https://www.plainsite.org/dockets/download.html?id=23144533&a=31&z=0ba6e5a4 30 *Gawker*, March 5, 2010, "Mark Zuckerberg Will Personally Hack Your Facebook Account."

https://gawker.com/5486554/mark-zuckerberg-will-personally-hack-your-facebook-account



One of the 2003 photographs of the Kirkland House courtyard used on the houseSYSTEM home page for house residents.

tion" that would have made any technically minded manager roll their eyes. That same night, he also met this report's author, Dustin Moskovitz, and Toni Marchioni (a friend of Mark's who had no involvement in the project) for dinner in Kirkland House.

Over dinner, as he had over e-mail, Mark pressed for information on how to "avoid getting ad boarded and such"³¹ given his ongoing issues with the Administrative Board thanks to Facemash, which had outraged women and minorities on campus. He also solicited help for an unnamed, vague new project he was working on involving

graph theory—a project that in his words he wanted to keep "on the [down-low]." When the author asked in person if it was a "Friendster for Harvard," he wouldn't say. When asked why it—whatever it was—wouldn't be better as part of houseSYSTEM, which already had over 1,200 members out of approximately 6,400 undergraduates, Zuckerberg declared that he was an independent kind of person and deemed houseSYSTEM "too useful." He was also clear that he had no intention of starting a business; whatever he was working on, it was more of a side project. It was a view he reiterated in later AIM conversations starting later that night after dinner. Three hours after the first conversation ended, Mark began a second conversation at 11:14 P.M.

zberg02: hey man

ThinkComp: hi

zberg02: i have a question

ThinkComp: ok

zberg02: are you interested in doing other things besides the housesystem venture?

ThinkComp: in what context

zberg02: like would you be interested in possibly partnering up to make a site if it would not be incorporated into housesystem

ThinkComp: for the sec? think? or separate

zberg02: separate i guess

ThinkComp: depends on the site i guess

zberg02: well it would be on the new thing i'm working on

zberg02: i could let you know exactly what i was thinking about it, but i'm a little worried that you might just be inclined to want to incorporate it into housesystem

zberg02: which isn't something i want right off the bat, and maybe not at all

ThinkComp: i guess i'd need to see the advantage of starting on something new

ThinkComp: since i've already sort of got a lot going on...

³¹ Greenspan, Aaron, *Authoritas* Interbook Resources, Think Press (2008). https://www.thinkpress.com/authoritas/housesystem/20040106121759.zuckerberg.pdf

ThinkComp: it's much easier to just incorporate things where they fit from my perspective **zberg02:** well i agree

zberg02: but we disagree on whether or not it would fit into housesystem

zberg02: well really i just want to make sure that we're not doing the same thing

zberg02: because then neither of us would succeed i think

ThinkComp: that's fair enough, but i don't understand why it wouldn't fit and why you wouldn't want to take advantage of the existing user base

ThinkComp: especially since i don't know how much people will trust sites you make on your own at this point

ThinkComp: just because of the previous negative publicity

zberg02: yea i hear that

zberg02: i think that house system is a much more professional app

zberg02: and people know it as that

ThinkComp: i really don't think you will get in trouble for being too professional

zberg02: well yea

zberg02: but that sort of makes it less interesting i guess

ThinkComp: i don't think so

zberg02: but it's made up for by its utility

zberg02: like i don't think i'd go to housesystem to procrastinate

ThinkComp: because it looks too nice?

ThinkComp: that seems sort of silly

zberg02: well just because of the functionality that's there presently

zberg02: and people's opinion of it based on that and how it's been marketed

While it may be tempting to take Mark's criticism of houseSYSTEM at face value, time has shown that the supposed question of how "professional" houseSYSTEM looked was a distraction from the real issue: who had control. As Mark was typing, he was aware of one project that might at the very least dilute interest for a "cool" campus-wide Facebook—Harvard Connection, which he was supposed to be cod-ing—and another that at least some students were already calling "cool" and "The Facebook"—houseSYSTEM. Having expressed worry about each competing project cancelling his out, his main goal was to disable both of these threats without the people behind each realizing what he was even working on.

In fact, houseSYSTEM did look professional, and a few individuals on campus were even confused as to whether or not it was an official University-backed project. Accordingly, the site's fine print on the bottom of each page read, "houseSYSTEM is not endorsed by or operated by Harvard University." Yet users on lowell-open wanted even more professionalism: SSL on every site, a formal security statement, and integration with Harvard's PIN authentication interface. If anything, they were dissuaded from using houseSYSTEM because it was not professional enough. Mark also suggested that houseSYSTEM required more information than he thought students would be willing to provide, even though he simultaneously argued that he wanted to build a site that would elicit the disclosure of considerably more personal information. By January, the controversy surrounding houseSYSTEM had been effectively resolved and students were signing up regularly. These arguments were merely distractions from his one true interest: the elimination of potential competition.

ThinkComp: in that case more time-wasting stuff would balance it out nicely

zberg02: perhaps

zberg02: but i really just want to make sure there's not a lot of overhead

zberg02: i am worried that registration for housesystem requires a lot of info

ThinkComp: yeah, it does

ThinkComp: but if 1200 people have filled it out so far, i'm not too worried...

ThinkComp: the most frequent reason i've heard for people not signing up for it is that they don't think anyone else is

ThinkComp: not that registration is hard

zberg02: i'm also a little skeptical about the culture of the site and people's willingness to give information about themselves

ThinkComp: or that it's too functional

zberg02: yea i agree...it is too functional

zberg02: like it's almost overwhelming

ThinkComp: well, but it's supposed to be

zberg02: like in a site where people give personal information for one thing, it then takes a lot of work and precaution to use that information for something else

zberg02: well it's good that it's functional

zberg02: it's just a little overwhelming for some people i think'

ThinkComp: perhaps

ThinkComp: in any case, why do you want me to work on your project then if the stuff i do is at odds with the atmosphere you're trying to create?

zberg02: you have good ideas clearly

zberg02: it's not that what you do is at odds with the atmosphere i'm trying to create

zberg02: it's just the atmosphere of housesystem isn't right i think

ThinkComp: from what i can tell it sounds like your idea might again be controversial from the perspectives of other students and administrators

ThinkComp: i'm not afraid of controversy clearly

ThinkComp: but i might be able to keep in it check as part of housesystem

ThinkComp: i'm not so sure i could if i worked on something with you independently

ThinkComp: and there's the very real risk that it could blow up in both of our faces, which i'd rather avoid

ThinkComp: i guess that's basically how i feel

zberg02: yea i don't think it's that controversial actually

zberg02: but it's tough for you to know that unless i tell you exactly what it is

zberg02: i guess basically it's a souped of version of one thing housesystem does **zberg02:** which i think didn't do as well as it could have as a stand-alone site

ThinkComp: ok

zberg02: but it's not like i took the idea from you

ThinkComp: sure, i understand

zberg02: so i guess the basic jist is that i feel as if it may compete with the facebook you're trying to implement

ThinkComp: brb phone

zberg02: okay

ThinkComp: hey i'm on hold

zberg02: okay

ThinkComp: so you're going to compete with the facebook?

zberg02: i think so

zberg02: like it will be slightly different audiences i think

ThinkComp: linking faces to courses?

zberg02: but in general i think most people won't want to submit their facebook picture to more than one site, do you agree?

ThinkComp: i dunno

ThinkComp: most people haven't even had the option of sending it to one

zberg02: really i see it as a problem of critical mass

zberg02: people won't; do it unless other people do it

ThinkComp: right

zberg02: and then it becomes a question of culture

zberg02: because it's not about who's actually doing it

ThinkComp: that's why i'm going to be talking to the uc

zberg02: it's about who people think are doing it

zberg02: i think it requires some hype

By finally stating "i think so" in response to the question of whether he planned to "compete with the facebook," Mark found himself in the awkward position of revealing his real intent while having to acknowledge that someone had beat him to the punch. Crucially, he didn't disclose exactly what he planned to call his site or exactly how it would differ from the houseSYSTEM Facebook, but he did make it clear that he viewed "hype" as a key factor in its success.

The Harvard Crimson

Mark had already seen and heard the Harvard Connection marketing plan, and he had a hunch that a few T-shirts and business cards wouldn't be enough to break any records. What the idea needed was press.

By "i think it requires some hype," Mark was referring to coverage in *The Harvard Crimson*, where both he and houseSYSTEM's creator had seen their names in print on multiple occasions. The key question was always how the articles were framed, and after suffering the consequences of negative stories it was an issue both students paid close attention to. With access to house mailing lists just as restricted as house Facebooks (or more so), *The Crimson* was unquestionably the best way to reach everyone on campus at once, and as much as they liked to deny it, students took it seriously. So did *Crimson* alumni who went on to work for *The New York Times*, *The Wall Street Journal*, *The Washington Post*, CNBC, and in the case of Steve Ballmer, Microsoft.

Mark's statement, "it's not about who's actually doing it; it's about who people *think* are *[sic]* doing it" (emphasis added) contained his own marketing plan in a nutshell: getting the entire student population to think that everyone on campus was signing up. It also inadvertently revealed his core ethos: his belief—often accurate—that perception could trump reality. A newspaper was the perfect tool to achieve these ends.

Lucky for Mark, he had a secret weapon: his roommate, Chris Hughes. Chris's conversation partner in French A was Rebecca Davis O'Brien, who happened to be an associate managing editor and columnist at *The Crimson*. Unlike Mark, Chris was very charming and had a knack for translating his roommate's awkward lust for control into something far more humane and even appealing.

Accordingly, under the direction of Elizabeth "Lizzie" Theodore, *Crimson* editors turned Mark into Harvard's bad boy: the guy who almost got kicked out of school for a chauvinistic prank, executed while drunk; the guy who showed why the whole campus needed a universal Facebook. Oddly, Theodore herself referred to Mark as "very sleazy,""very very weird" and evasive when Mark appeared at the *Crimson*'s offices³² to defend himself against the Winklevosses' claims.³³ But that didn't stop the newspaper from heaping on the praise for years on end. In 2004 alone, *The Crimson* published at least 15 articles mentioning thefacebook.com, almost all of them positive. In 2005, there were 15 more. By 2006, the site had exploded in popularity nationwide. "People's willingness to give information about themselves" and "the culture of the site" itself turned out to be dictated mostly by the newspaper.

Keeping Everyone Guessing

On January 8, 2004 over AIM, Mark was unconcerned about keeping controversy "in check," or worse, the possibility that the site could "blow up in both of our faces." These statements were references to the trouble Mark had found himself in after Facemash precisely because of his stark inability to gauge the risks of abusing personal

³² At one point, frustrated with the lack of coverage in *The Crimson* about houseSYSTEM, the author also walked into the newspaper's offices. Editors were not immediately convinced that they should write anything more about the site.

³³ Business Insider, March 5, 2010, "In 2004, Mark Zuckerberg Broke Into A Facebook User's Private Email Account." https://www.businessinsider.com/how-mark-zuckerberg-hacked-into-the-harvard-crimson-2010-3

information. Based on Mark's interest in using even more student data right away, it seemed likely that he hadn't learned anything from the experience, except perhaps that apologies calmed down adversaries and that he should avoid getting caught in the future. He confirmed his naïveté in this regard with the statement, "i don't think it's that controversial actually."

Just three days later, on January 11, 2004, in a brazen move, Mark quietly purchased the domain name thefacebook.com without informing either his client or the student he had begun relying upon for advice—who already operated a product called The Facebook. According to server logs,³⁴ he continued to browse the houseSYSTEM Facebook for inspiration, and eventually, to find out if the Winklevoss twins had discovered houseSYSTEM. At that point, they hadn't. But Harvard Connection's other programmer, Victor Gao, had been a member for nine months, since March 9, 2003.

Another three days later, on January 14, 2004, court documents indicate that Mark had his final meeting with the Harvard Connection team.

"[Mark] met with Cameron, Tyler, and Divya for the last time. During the meeting at Kirkland House, Mark expressed doubts about the viability of HarvardConnection.com. He said he was very busy with personal projects and school work and that he wouldn't be able to work on the site for a while. He blamed others for the site's delays.

He did not say that he was working on his own project and that he was not planning to complete the HarvardConnection site.

After the meeting, Mark had another IM exchange with the friend above. He told her, in effect, that he had wimped out. He hadn't been able to break the news to Cameron and Tyler, in part, he said, because he was 'intimidated' by them. He called them 'poor bastards.''³⁵

Given her otherwise inexplicable presence at the January 8th dinner meeting, it's likely that this female friend was Toni Marchioni. Whoever this friend was, Mark followed up via IM regarding the Winklevoss project:³⁶

zberg02: Yeah, I'm going to fuck them zberg02: Probably in the year zberg02: *ear [Unknown]: Haha sounds good

34 Mark wondered in writing over IM whether he was being tracked by the University as he took actions that he knew were unethical, and were in fact illegal. At the very least, houseSYSTEM's server logs tracked his activity on that site.

³⁵ Business Insider, March 5, 2010, "At last — the full story of how Facebook was founded." https://www.businessinsider.com/how-facebook-was-founded-2010-3

³⁶ Business Insider, May 17, 2012, "EXCLUSIVE: Mark Zuckerberg's Secret IMs From College." https://www.businessinsider.com/exclusive-mark-zuckerbergs-secret-ims-from-college-2012-5

[Unknown]: Did you talk to your parents about this?

zberg02: Yeah I got their support. I also got a friend to pay for my servers and stuff so I can get whatever equipment I need.

Whether she was the recipient of these messages or not, as a Kirkland House resident and Mark's friend, Toni was one of the first people in the world to have an account on the facebook.com. Today, it appears that she no longer does.

thefacebook.com Launches

The version of The Facebook that launched on February 4, 2004 was notable for how incredibly basic it would appear to individuals familiar with the company's current product. There was no mobile version as smartphones were still three years



A screenshot of Mark Zuckerberg's version of The Facebook home page from early 2004, with the "a Mark Zuckerberg production" footer literally front and center.

away. There was no real-time chat. The site's main draw was its ability to search for and connect with others anywhere on the Harvard campus, publicize one's social status, send and receive messages, and find common friends thanks to Mark's graph theory work—in reality, much of it based upon or contributed by Mark's high school friend Adam D'Angelo, who had created a similar site called BuddyZoo at CalTech.

Although thefacebook.com did not integrate with users' e-mail directly as houseSYSTEM did, practically every action taken on the site generated an e-mail, which houseSYSTEM generally did not. As a result, students who signed up were flooded

with e-mails right away that continuously drew them back to the site to find out what had happened, thus beginning a cycle of addiction that for some continues to the present day. New features were added regularly—the same ones that Mark had called "overwhelming," and then some. So long as he was in control, he saw no "atmospheric" problem.

Mark began misleading his users from day one by publicly taking credit for the entire site, when credit was not only his to take. Every page contained the footer "a Mark Zuckerberg production."³⁷ In addition, the name of the product, The Facebook, was already being used by Harvard University, houseSYSTEM—which Mark obviously knew, as a particularly interested member and Harvard student—and numerous other universities, all of which had used the term for years dating back to 1902.³⁸

³⁷ Later; Mark also referred to himself as "The Creator" on the first account in each new school's reserved user ID block. Famously, his Facebook business cards would also one day read, "I'm CEO, bitch."

³⁸ The New York Times, May 1, 2009, "The 'Face Book Fad' Is More Than a Century Old."

https://bits.blogs.nytimes.com/2009/05/01/the-face-book-fad-is-more-than-a-century-old/

What Mark did not do was invite houseSYSTEM's creator to join The Facebook, let him know that his site had launched, or even send a friend request once he did join a few hours later—as user ID 82. (On houseSYSTEM, Mark's user ID was 1234.) It was the first clear sign that the two students would have a limited friendship.

The Initial Business Model

On the day it launched, thefacebook.com lacked advertisements, and Zuckerberg was averse to the idea of making them part of the user experience. Having admitted to a friend, "Well I don't know business stuff," he delegated the problem of making money to his co-founder and investor Eduardo Saverin. He told the same friend that he was just "content to make something cool," and on April 20, 2004, wrote to the author of this report via AIM:

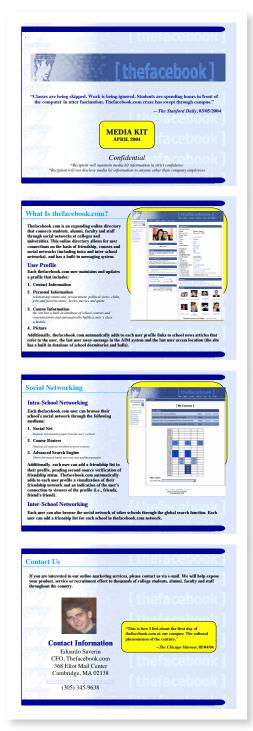
zberg02: so we're getting ads
zberg02: and since we get 3 million hits a day
zberg02: we can pay people well
ThinkComp: cool
zberg02: and then once we have enough money we just take down the ads
ThinkComp: hmm, i don't know about that.

In the same conversation, Mark posited that a threshold of "probably like 8k" (presumably referring to dollars per month) would be enough for Facebook to no longer need advertising revenue. Obviously, that promise to remove advertisements from the site upon reaching the milestone of "enough money" has still not yet been realized. Mark also made a joking reference to "business slaves," further illustrating his obsession with control and dominance over others.

zberg02: is that what your business slaves are doing?
ThinkComp: i have no business slaves hehe
zberg02: haha right
ThinkComp: i am the slave

Mark also revealed that he was maybe considering turning the Facebook into a business after all, despite his initial denial on January 8th that he had any interest in money, at the time making the issues of corporate control and competition seemingly moot.

zberg02: so is this a part of the gameplan for next year?
zberg02: sell housesystem to colleges?
ThinkComp: maybe. not really sure.
ThinkComp: it would be nice, but i'm not counting on it.
ThinkComp: it's a tough sell.



As early as April 2004, The Facebook had a media kit for advertisers prepared by Eduardo Saverin, boasting of features that were originally found on houseSYSTEM, such as a course scheduler and birthday reminders. The kit relied heavily on press mentions. But Saverin spent the summer of 2004 working as an intern at Lehman Brothers, evoking Mark's ire. **zberg02:** these guys have been in contact with me aboutt hefacebook -- they really want to invest in it or something

zberg02: but they want to turn it into a portal

zberg02: i bet you could just like sell housesystem to them **ThinkComp:** heh

ThinkComp: are these people serious or just looking for money

zberg02: they're like greenwich types

zberg02: you're not from greenwich, right? haha

As usual, Mark held his cards close to his chest, making it difficult to gauge how serious he was about fundraising. The "greenwich types" he was talking about were individuals connected to and including Robert H."Bob" Lessin, a one-time superstar Morgan Stanley investment banker, technology investor, and Vice Chairman of Jeffries Financial Group. He had attended Harvard College and Harvard Business School, and his son, Sam, was a member of the class of 2005, one year ahead of Mark. Together, Sam Lessin and another student named Tali Rapaport created a houseSYSTEM Student Exchange competitor similar to Craigslist called CrimsonxChange, which charged students via credit card to buy and sell used textbooks and items.³⁹ Although Mark turned down the elder Lessin's offer to invest in his Facebook, the connection would later prove to be crucial to Facebook, Inc.'s development.⁴⁰

What interested investors so much was the theoretical promise of the Facebook model of advertising: that by collecting enough information about its users, advertisers could offer targeted promotions that would likely have more success than a typical banner advertisement, television commercial, or print advertisement. Eduardo Saverin's April 2004 media kit stated, "Thefacebook.com allows for targeted advertisement on basis of any (or a combination of) the following parameters: College/University, Degree Type, Concentration, Courses Taken, Class Year, House/ Dormitory, Age, Gender, Home City/State/Zip Code, Relationship/Dating Interests, Personal Interests, Clubs and Jobs, Political Bent, Number of Intra/Inter-School Friends,

³⁹ The principals of houseSYSTEM and CrimsonxChange met on October 30, 2003, but reached an impasse over the fact that houseSYSTEM was free for students to use.

⁴⁰ New York Magazine, November 2, 2010, "Why Did Mark Zuckerberg Pay \$20 Million in Facebook Stock for Brooklyn Entrepreneur Sam Lessin?" http://nymag.com/intelligencer/2010/11/just_how_badly_did_mark_zucker.html

Site Usage." It did not offer any evidence that such targeting produced better outcomes for advertisers, however. It was widely accepted at the time that targeted advertising technology would undoubtedly yield better responses in the form of clicks and ultimately, purchases, relative to traditional banner advertisements.

Mark was well aware that he was being entrusted with valuable information, even if he wasn't personally sure how to profit from it. In another IM conversation with an unknown friend, he attempted to impress whomever was on the receiving end.

zberg02: Yeah so if you ever need info about anyone at Harvard zberg02: Just ask.
zberg02: I have over 4,000 emails, pictures, addresses, SNS
[Unknown]: What? How'd you manage that one?
zberg02: People just submitted it.
zberg02: I don't know why.
zberg02: They "trust me"
zberg02: Dumb fucks.

Yet again, Mark confirmed what Harvard administrators had already begun to suspect: that his behavior made him unsuitable for continuing studies at the university. Mark discussed this issue with a friend as well.

[Unknown]: But what are the grounds for kicking you out of school?

zberg02: Unethical behavior.

[Unknown]: Uh. Wouldn't that be contingent on the court case?

zberg02: Haha man come on. You can be unethical and still be legal that's the way I live my life haha.

Mark wasn't kidding. He also acknowledged in writing that he had abused his administrative privileges with his own Facebook and with ConnectU in ways that unquestionably violated 18 U.S.C. § 1030, the Computer Fraud and Abuse Act, which prohibits "having knowingly accessed a computer without authorization or exceeding authorized access."⁴¹ Ironically, this is exactly what members of the lowell-open mailing list falsely accused houseSYSTEM's creator of doing with no foundation whatsoever.

zberg02: Crimson has this internal email list

zberg02: Where they just like gossip about everyone

zberg02: So I want to read what they said about me before the article came out and after I complained.

zberg02: So I'm just like trying the email/passwords of everyone who put in that they're in the Crimson. I wonder if the school tracks stuff like that

⁴¹ Business Insider, May 17, 2012, "EXCLUSIVE: Mark Zuckerberg's Secret IMs From College." https://www.businessinsider.com/exclusive-mark-zuckerbergs-secret-ims-from-college-2012-5

[Unknown]: Did you get in? zberg02: To 2

Aside from breaking into other students' e-mail accounts with plain text credentials he took from thefacebook.com, Mark also deleted profiles on ConnectU and created a fake Cameron Winklevoss's profile listing his hair as "Ayran [sic] Blond." Undoubtedly, Harvard's servers did track Mark's illegal activity, though neither the University nor the newspaper ever made those logs public. In contrast, houseSYSTEM's access logs were made public with respect to Mark's usage, and they demonstrated that he had used the site heavily in the run-up to Facebook's launch—and after.⁴²

The AIM conversation in which Mark admitted to hacking *The Crimson* is consistent with IM messages from Mark to the author of this report. On May 24, 2004, Mark specifically asked about the internal *Crimson* e-mail listserv, newstalk.

zberg02: how do you get on newstalk? ThinkComp: no idea ThinkComp: i'm not on it ThinkComp: you have to be a crimson staffmember zberg02: oh okay zberg02: so you have to fake comp zberg02: haha ThinkComp: i guess ThinkComp: you think they're talking about you? ThinkComp: :-) **zberg02:** apparently the winklevoss twins are spreading that i took the idea for thefacebook from them zberg02: as if there was an idea haha zberg02: well apparently there was supposed to be an article on it today zberg02: and there is none zberg02: so i can't tell if that's good or bad ThinkComp: winklevoss? ThinkComp: who the hell is that zberg02: the people who made connectu ThinkComp: i see **ThinkComp:** they took a fair bit from housesystem too it seems. ThinkComp: whatever. zberg02: yea but they blame me for stealing stuff because i helped them for like a month zberg02: but then i got bored and quit ThinkComp: when was this

⁴² Think Computer Corporation v. Facebook, Inc. Timeline of Events. http://www.thinkpress.com/authoritas/timeline.pdf

zberg02: in november ThinkComp: aha ThinkComp: that would make sense then ThinkComp: they wrote about you on their about page ThinkComp: without mentioning you zberg02: yea but their site used to be purely a dating site zberg02: and then they included so much from other social networking sites **zberg02:** and claimed i stole that from them zberg02: like the notion of friends zberg02: choosing courses that you're taking zberg02: being at multiple schools zberg02: they even took poke haha ThinkComp: yeah, i saw that. ThinkComp: the joys of intellectual property. zberg02: well it isn't really anyone's zberg02: i don't care that they took it zberg02: but they shouldn't say i took it from them haha ThinkComp: oh, it's someone's. ThinkComp: but trying to figure out whose at this point is pretty much a lost cause ThinkComp: one thing about social networking sites **ThinkComp:** is that they spread virally ThinkComp: not just their members ThinkComp: the sites themselves. zberg02: haha yea zberg02: well it was sixdegrees' ThinkComp: i remember them back in 1997 **ThinkComp:** but i'm sure someone thought of it before them even zberg02: yea true zberg02: oh well zberg02: there are no school newspapers and ad boards after you graduate :-) zberg02: only the new york times and federal courts haha zberg02: but i feel like those are at least more fair **zberg02:** or maybe it's like the godfather, where the further up you go, the more corrupt it is Indeed, as Mark moved "further up" the lists of the richest men in the world, The Crimson rewarded him with more glowing news coverage than ever before, even having

been a victim of his crime. So did the rest of the media, and before long, the federal courts did their part to help Facebook, as well.

The ConnectU Litigation

Even with an amorphous product, no technical skills, no company,⁴³ and not much of a plan to promote it beyond parties and swag, the Winklevoss twins and Divya Narendra felt acutely wronged by their contract programmer, whom it appears they never paid in cash or in stock. They filed a complaint with Harvard administrators, who took it seriously given Mark's history with Facemash.

Mark was forced to respond. On February 17, 2004, at the request of John Walsh, the Allston Burr Senior Tutor for Kirkland House, he wrote an e-mail explaining his



Left: The Winklevoss twins. Source: Evan Agostini/Invision (AP) Right: Divya Narendra. Source: Facebook

side of the story. In that message, he lied repeatedly and then laid it on thick, painting himself as a overly generous do-gooder who had been abused by demanding, jealous thugs. Specifically, in an effort to put to rest allegations that there had been a conflict of interest, Mark stated that, "After that meeting [on January 14, 2004] I began making thefacebook." The evidence clearly shows otherwise. He also wrote, "I didn't stall them unnecessarily"—a far cry from "So I'm like delaying it so it won't be ready until after the

facebook thing comes out," and "Yeah, I'm going to fuck them; probably in the ear."

On July 31, 2004, with no hope of competing against thefacebook.com, and with Mark having added most of its core features to his own site, houseSYSTEM shut down.

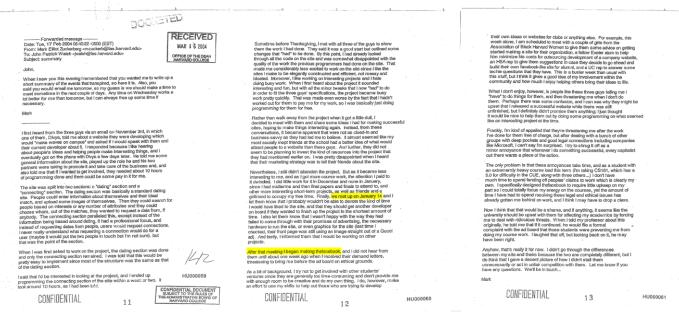
By the fall of 2004, at a minimum Mark Zuckerberg had violated both federal criminal law (18 U.S.C. § 1030) and state civil law (Chapter 93A of the Massachusetts General Laws, which prohibits unfair business practices). He had lied to a client (ConnectU), exceeded his authorization to delete data from its database, maligned one of its founders, schemed to secretly oust his own co-founder (Eduardo Saverin),⁴⁴ misled and/or lied to his Computer Science 91r classmate and someone he referred to as his "friend" (the author of this report), stolen e-mails pertinent to federal litigation from a newspaper and/or Harvard University, misled and lied to Harvard University administrators, and tricked his fellow students—whom he referred to as "dumb fucks"—into handing over their data, including their passwords, which he had in some cases then stolen.⁴⁵ Zuckerberg's serial abuse of those who put trust in him ultimately led to this encounter reported by *Rolling Stone* in 2010:⁴⁶

⁴³ ConnectU, LLC was not incorporated in Delaware until April 6, 2004. ConnectU, Inc. was not incorporated in Massachusetts until July 14, 2006. At the time Mark worked on Harvard Connection, no corporate entity existed.

⁴⁴ Although Mark did not immediately plot against co-founder and roommate Chris Hughes as he did with Saverin, he did give him far less of the company than Hughes had asked for: two percent, instead of ten. Hughes later left the company, albeit \$430 million richer. See *The New York Times*, February 25, 2018, "Chris Hughes Made Millions at Facebook. Now He Has a Plan to End Poverty." https://www.nytimes.com/2018/02/25/books/review/chris-hughes-fair-shot.html

⁴⁵ One of Mark's own passwords, directly or indirectly protecting an increasingly valuable cache of personal data, was later revealed to be "dadada". See "Mark Zuckerberg's password was 'dadada'. What hope do the rest of us have?" https://www.telegraph.co.uk/technology/2016/06/06/mark-zuckerbergs-password-was-dadada-what-hope-do-the-rest-of-us/

⁴⁶ Rolling Stone, September 15, 2010, "The Battle For Facebook."



After Harvard's Administrative Board failed to discipline him for Facemash, he had no qualms about lying repeatedly to the Board regarding his work for ConnectU. Later, Harvard would invite Mark to be its commencement speaker, and bestow upon him an honorary Doctorate of Laws.

"Not long after the incident, Cameron Winklevoss ran into Saverin in a bar in New York. Saverin, Winklevoss said in a deposition, apologized to him.

'Sorry that he screwed you,' Saverin allegedly said. 'Mark screwed me, too.'''

As sons of a wealthy businessman who ran Winklevoss Consulting, Inc.—a firm with its own general counsel on staff—the Winklevoss twins were in a far better position to handle Mark than the rest of the individuals and institutions he had crossed paths with. In what is now the stuff of legend, the successor to Harvard Connection, ConnectU, LLC, filed suit on September 2, 2004 in Massachusetts District Court. The case was assigned to Magistrate Judge Robert B. Collings, a former prosecutor nearing the end of his career.⁴⁷ On March 2, 2007, two and a half years later, Collings recommended that Facebook's motion to dismiss the case be granted.⁴⁸ After some sparring over court costs, ConnectU appealed to the United States Court of Appeals for the First Circuit, which took another year and four months to determine that Judge Collings was in error, reversing his decision.⁴⁹ By that time, three weeks prior, as the result of a counter-suit pending in California in which Facebook alleged that ConnectU had tried to steal user data,⁵⁰ the parties had already settled for what was later revealed to be \$65 million in stock.

https://www.rollingstone.com/culture/culture-news/the-battle-for-facebook-242989/

⁴⁷ ConnectU LLC v. Zuckerberg et al, Massachusetts District Court, Case No. 1:04-cv-11923-DPW. https://www.plainsite.org/dockets/2jjmkdlp/massachusetts-district-court/connectu-llc-v-zuckerberg-et-al/

⁴⁸ The author of this report was deposed for the ConnectU litigation, with his legal counsel paid for by Facebook, Inc. See http://www.thinkpress.com/authoritas/housesystem/20071129.deposition.pdf (transcript) and https://www.youtube.com/watch?v=4j5CyMnKz54 (video demonstration).

⁴⁹ ConnectU LLC v. Zuckerberg, et al, Court of Appeals for the First Circuit, Case No. 07-1796.

https://www.plainsite.org/dockets/gt6w30ua/court-of-appeals-for-the-first-circuit/connectu-llc-v-zuckerberg-et-al/

⁵⁰ Mark admitted in AIM conversations to deleting ConnectU user accounts without permission and attempting to link the Winklevosses to white supremecists. ConnectU's actions to scrape Facebook data could be considered retaliation.

Friends Don't Let Friends Friend Friends

As the ConnectU litigation was just beginning, by late 2004, thefacebook.com was the go-to URL for college students across the country, and Mark Zuckerberg was beginning to be a household name. The site's popularity and rate of growth were nearly unprecedented, and the mainstream media authored breathless article after breathless article to sing its praises. As college seniors majoring in journalism graduated from the class of 2004, many brought with them to their newsrooms an addiction to and enthusiasm for a new website that they were eager to inform the world about.^{51,52} In the words of Rebecca Davis O'Brien, "It wasn't just that we had no idea. We were excited. Putting up our own information, making us accessible, speaking for ourselves, seemed the right and daring thing to do."

By March 2005, news of ConnectU's lawsuit against Zuckerberg and The Facebook was spreading. So was the site. "Current membership exceeds 2 million users and the current growth rate is estimated at 10,000 new members per day, according to Hughes," wrote Hannah Miller in The Brown Daily Herald on March 7.53

Zuckerberg dropped out of Harvard College and moved to Palo Alto, where he and former Napster founder Sean Parker found that they could each benefit from the other. Mark needed a more experienced partner who knew the lay of the land in Silicon Valley, whereas Parker was looking for his next venture, his previous one having been sued into oblivion by the record industry.

Wirehog ; October 8, 2004 at 2:35 PM zuck (mark zuckerberg) wants to be your friend on Wireh Details To: Aaron Greenspan
thinkcomp, zuck (Mark Zuckerberg) has requested to be your friend on Wirehog. This will allow you to share files and see each other's Wirehogs. For now, you can browse zuck's files at: <u>http://zuck.wirehog.com</u> Thanks, the wirehog team.
Mark Zuckerberg was willing to extend a friend request to an actual friend on Wirehog when there was no competition involved and he needed advice. Yet no friend request on thefacebook.com was ever forthcoming, as it might have alerted that same friend—also a competitor—to his duplicity.

They also shared an interest in music technology. As early as late 2004, Mark had grown bored of working on Facebook and was focusing much of his efforts on Wirehog, a "file" (read "music") sharing service. The author of this report and Mark spoke at length on AIM on October 8, 2004-a conversation that disappeared when AIM crashed about why he should avoid focusing on a project that could open Facebook to serious legal liability. Whether Mark took that advice to heart or not, eventually, Wirehog shut down.

51 The Guardian, April 17, 2018, "I was one of Facebook's first users. I shouldn't have trusted Mark Zuckerberg." https://www.theguardian.com/technology/2018/apr/17/facebook-people-first-ever-mark-zuckerberg-harvard

- 52 The Daily Beast, September 8, 2010, "Mark Zuckerberg at Harvard: The Truth Behind 'The Social Network." https://www.thedailybeast.com/mark-zuckerberg-at-harvard-the-truth-behind-the-social-network
- 53 The Brown Daily Herald, March 7, 2005, "ConnectU and Thefacebook face off." http://www.browndailyherald.com/2005/03/07/connectu-and-thefacebook-face-off/



While Mark was distracted by other endeavors, much of the coding on The Facebook fell to Dustin Moskovitz, who had taught himself to code in order to help his roommate. One of the newer features on The Facebook in early 2005 was a friend export function, which permitted users to create lists of their friends in downloadable CSV format. This could then be imported into spreadsheet software such as Microsoft Excel. The original implementation of this functionality had a serious flaw. Mark was notified on March 20, 2005 by e-mail:

"Mark,

There's a security problem in thefacebook with the way you guys are doing data exports. To sum things up, it's a bad idea to leave text files sitting around on the servers with people's data in them. It potentially affects all users since anyone can run vcard. php, and it's made worse by the fact that your load balancer actually writes the same file to multiple servers at random if you run the script more than once. Even though it's probably not the most popular feature, it may be a serious concern to some people, and you may want to notify users that their data may have been at risk under certain circumstances. It only takes a very small amount of code to exploit, though I've only tested the flaw on a narrow scale primarily using my own ID.

Send me an e-mail if you have any questions.

Aaron"

Mark responded right away.

"thanks, i didn't write that code but i'll address the problem this evening."

He didn't. The problem remained for several days, until a press release by the author's company, lacking the specific details necessary to reproduce the problem, made it public on March 24th:

"The database that stores information for thefacebook.com includes fields for each student's first name, last name, home mailing address, school phone number, cell phone number, school e-mail address, alternate e-mail address, and birthdate, among other pieces of information. The flaw in the system, which is related to the site's file export functionality, reveals data for all of the above fields, making it easy for anyone with malicious intent, or even the desire to merely compile a list of students for marketing purposes, to download the information.

Think's tests of the flaw indicate that it is not limited to Harvard, but that it also applies to every other school listed on the facebook.com, for a total of 435 schools. Due to the interconnected nature of the site's information, targeting one student, such as

any student in a leadership position, can reveal information on hundreds of others."

It was a warning shot, but the flaw remained. By April 6th, when *The Yale Daily News* wrote about the flaw in the context of a broader article about internet security, it still had not been properly addressed.⁵⁴ Not surprisingly, Mark Zuckerberg saw the article and the following day had something to say about it.

zberg02: oh...are you going to be on the phone for a while? ThinkComp: maybe 10-15 minutes ThinkComp: hey sorry about that **ThinkComp:** i assume you got a call fro the crimson zberg02: yea ThinkComp: because i did ThinkComp: heh zberg02: yea it's because of the yale article ThinkComp: i still don't think the problem is really addressed at its root ThinkComp: because the files are still there on the server **zberg02:** yea the right solution is to have the php file sent a header saying it's a csv file ThinkComp: right zberg02: yea i didn't write that file zberg02: my roommate did zberg02: and he was in italy for a couple of weeks ThinkComp: well that doesn't matter so much who wrote it zberg02: yea i know i'm just saying he's fixing it ThinkComp: alright ThinkComp: i'm glad :-) **ThinkComp:** i mean in the grand scheme of things it's not a huge problem ThinkComp: i dont think anyone malicious has exploited it **zberg02:** i was just wondering why you chose to publicize it though **zberg02:** because publicizing it definitely blows it out of proportion zberg02: it's a minor flaw, but pretty hard to exploit

By this point, Mark had admitted once again that he had known about the flaw and knew what the best technical resolution was. Yet despite promising to fix it the same night, he was blaming the prolonged issue on Dustin Moskovitz travelling to Italy. As usual, he completely minimized the potential negative effects of his creation, failing to realize that even a couple of lines of poorly-written code could in fact form a hole big enough to extract an entire database through. His biggest concern: bad press. The conversation continued.

⁵⁴ The Yale Daily News, April 6, 2005, "Safety of private info on Internet is questionable." https://yaledailynews.com/blog/2005/04/06/safety-of-private-info-on-internet-is-questionable/

ThinkComp: i'm not sure i agree...

zberg02: and even if it could be exploited, that information is available on the site anyway...

ThinkComp: not to non-members

ThinkComp: you've gone to pretty great lengths to prevent people from accessing data at other schools

ThinkComp: even when they are members

ThinkComp: also your privacy policy says that things are secure more or less

zberg02: yea well we try to make them secure

ThinkComp: of course

ThinkComp: basically i don't think it's really appropriate not to tell people when there's a problem

zberg02: i think in general we do a good job

ThinkComp: i agree, it's much better now than it used to be

ThinkComp: but hiding security flaws is generally not a good thing

zberg02: i wasn't hiding it

zberg02: but i think releasing a press release is a bit much

ThinkComp: you were not publicizing it

ThinkComp: it's the generally accepted way to announce things

zberg02: especially because your press release was biased and made it seem like anyone could get anything

zberg02: which isn't even ture

ThinkComp: well anyone could

ThinkComp: what part was not true

zberg02: only if the file was there

zberg02: which it isn't unless someone had exported their contact info recently

ThinkComp: i exported my data months before i found the flaw

ThinkComp: and it was still there

zberg02: weird

Mark was not wrong to think that issuing a press release so soon after being put on notice of a flaw was unusual. On the other hand, many of Mark's business practices were also unusual. He did not follow through with his promise to patch the issue, did not follow up otherwise (even after the press release and before the article in the Yale newspaper), and had failed to provide notice of several key events previously (his decision to use a generic name that would undoubtedly cause harm to a friend and confusion on campus, registration of his domain name, the launch date of his site, his decision to run The Facebook as a business, his decision to incorporate, his decision to seriously consider raising funding, etc.) He then revealed that he didn't have a full appreciation for the seriousness of the flaw he had left unpatched.

ThinkComp: at first anyone who had ever exported had their data in the vcards directory

ThinkComp: there was a lot of data there

zberg02: i guess purging was added recently

zberg02: yea

ThinkComp: yeah only last week

ThinkComp: or two weeks ago now

zberg02: yea, so anyhow we fixed it

zberg02: it's relatively secure now because the file is randomized

ThinkComp: relatively i guess it's better

zberg02: and i'll have dustin make it so the file doesn't stick around and then it will be better

ThinkComp: only because of the random filename

ThinkComp: the image matching field does no good at all

ThinkComp: i'm not sure why it's there

zberg02: that's to solve a different problem

ThinkComp: ok

zberg02: but anyhow

zberg02: i kind of view you as a friend

ThinkComp: likewise

zberg02: we don't talk frequently but we ask each other questions about stuff

ThinkComp: right, and i'd like to keep it that way

ThinkComp: but when i tell you that something is wrong

ThinkComp: and you know that it affects several hundred thousand people

zberg02: and i understand about wanting to keep stuff secure

ThinkComp: and then nothing happens for a week

ThinkComp: or more in this case

ThinkComp: i'm gonna tell someone

zberg02: it wasn't more

zberg02: it was 3-4 days i think

zberg02: until dustin got back

zberg02: and then he added purge

ThinkComp: regardless

ThinkComp: ok well if you ever find a problem in my code, which you very well might **zberg02:** and then he added randomness

ThinkComp: i will fix it instantly

ThinkComp: not 3-4 days later

zberg02: i appreciate that

ThinkComp: i don't care who wrote it

ThinkComp: or where they are

ThinkComp: it's your responsibility to get it done

zberg02: yea but it's also my responsibility to get other stuff done as well
zberg02: you know how it is to run a business
ThinkComp: believe me, i totally understand that :-)
ThinkComp: i'm drowning in taxes
ThinkComp: and have 20 other projects going on
zberg02: yea
ThinkComp: but those projects affect maybe 30 people collectively
ThinkComp: and there's no danger element
zberg02: and i really do get that you care about people's security
ThinkComp: you could have opened yourself up to another lawsuit had you left it open longer
zberg02: not quite
ThinkComp: oh yes
ThinkComp: very much so

ThinkComp: FTC code section 5

The failure on Mark's part to admit the significance of security and privacy breaches would later result in serious FTC scrutiny of, and ultimately a Consent Order against, his company, as predicted in 2005. Instead, Mark's main concern was that negative publicity resulted in "hysteria."

zberg02: i don't care if people who understand this stuff know about the bug

zberg02: because they are capable of understanding when it's patched and when it's secure and the extent to the insecurity

zberg02: talking to newspapers that target our audience causes some hysteria, which just isn't necessary

zberg02: especially given the magnitude of the problem

zberg02: a whole article is being written about in the crimson now

zberg02: do you think that's right?

ThinkComp: absolutely

ThinkComp: it will make people aware of this kind of thing

ThinkComp: and people really need to be aware

zberg02: to some extennt

zberg02: but it will also cause some hysteria

ThinkComp: well that's your hypothesis

ThinkComp: i doubt there will be any hysteria

zberg02: well it will probably cause more fear than there needs to be

zberg02: given that it's patched now

ThinkComp: well i would argue that people being afraid of disclosing their home address and birthday on a site accessible by millions of people isn't that bad of a thing

zberg02: okay, well that's an opinion

ThinkComp: yes, it is

zberg02: okay, well the reason why i really wanted to mention this to you is because i remember we spoke on the phone a few months back

ThinkComp: i guess you haven't had anything horrible happen to make you feel that way, and for that i'm glad

ThinkComp: but after the payroll mess i'm in

ThinkComp: i believe that pretty strongly

zberg02: and you talked about you tend to antagonize people by doing certain things

zberg02: i just felt that you should know that i felt antagonized by this

ThinkComp: well i apologize, but you were forewarned

zberg02: i understand that you feel a certain way and want to protect a privacy idea that you hold, but i guess i'd just expect a friend to act differently

ThinkComp: right, and i expected you to take me seriously enough to fix it.

zberg02: and i did

ThinkComp: did you actually fix it that night, like you said you would in your email? ThinkComp: no

The last part of the conversation would later have major significance for Facebook, Inc.

ThinkComp: and i re-read my press release ThinkComp: and it's all true zberg02: not everyone's information is available ThinkComp: i don't think i said that zberg02: less than 2% of users have ever exported their contact info ThinkComp: right, but matt mahan had 750 friends ThinkComp: there are 6,400 students at harvard ThinkComp: that's already more than 10% of the undergraduate body with 1 person's ID zberg02: at a small school like harvard, yea zberg02: anyhow, not worth arguing about ThinkComp: i agree ThinkComp: what's important is that it is or gets fixed. zberg02: if you feel like there's a chance that the crimson is going to blow this out of proportion, then maybe you could call them back to make sure they understand what you mean to get across zberg02: i mean misrepresent you, not blow this out of proportion ThinkComp: i don't remember the reporter's name, but i asked him to email me my quotes so i could verify their accuracy **ThinkComp:** when he emails me, i will reply to him and bcc you zberg02: okay zberg02: thanks

PlainSite Reality Check

ThinkComp: meanwhile, i really do have to get back to work. zberg02: i should probably get back to my taxes now haha ThinkComp: yes zberg02: yea... ThinkComp: i'll talk to you later i hope zberg02: yup, see you

In the long run, the *Crimson* article that ran⁵⁵ would be the least of Mark's problems. Mark acknowledged that he understood—in mid-2005—that the nature of the flaw involved access to information about friends of friends. With the ID of one Facebook user, such as former Harvard Undergraduate Council president Matt Mahan, an attacker could access a wide variety of information about all of Mahan's 1,000 friends. Mark's response: that it was "not worth arguing about."

That would turn out to be wrong.



Mark Zuckerberg acting particularly smug during a 2005 appearance at Stanford University in which he brazenly lied about the site's origins. At the time, most journalists focused on his footwear, as opposed to the accuracy of his statements.

Displaying a remarkable ability to ignore the interests of his supposed friends, Mark was often comfortable that his view of reality was the only one that mattered. Later in 2005, he was interviewed by his venture capital investor Jim Breyer at Stanford University about the success behind his site. During that videotaped interview, Mark began his explanation of The Facebook with, "So, um, I did two years at Harvard. During my sophomore year, I decided that Harvard needed a Facebook. It didn't have one. So I made it. That's basically how it got started."⁵⁶ This outrageous summary was, of course, a lie.

On September I, 2007, apart from the ConnectU litigation, the public got a hint that Mark's repre-

sentations might not always be completely truthful. *The New York Times* home page featured an article by veteran technology reporter John Markoff⁵⁷ about houseSYS-TEM.⁵⁸ According to the article, "Mr. Zuckerberg declined to be interviewed, saying through a spokeswoman that he was not sure how to respond."

⁵⁵ The Harvard Crimson, April 8, 2005, "Alum Finds Facebook Bug."

https://www.thecrimson.com/article/2005/4/8/alum-finds-facebook-bug-under-certain/ 56 YouTube, "James W. Breyer and Mark E. Zuckerberg Interview, Oct. 26, 2005, Stanford University."

https://www.youtube.com/watch?time_continue=210&v=WA_ma359Meg

⁵⁷ Wikipedia, "John Markoff." https://en.wikipedia.org/wiki/John_Markoff

⁵⁸ The New York Times, September 1, 2007, "Who Founded Facebook? A New Claim Emerges." https://www.nytimes.com/2007/09/01/technology/01facebook.html



FarmVille was the subject of myriad lawsuits. (See the Zynga, Inc. PlainSite profile at https://www.plainsite.org/profiles/zynga-inc/.) The company never rebounded to its peak during the heyday of the Facebook Platform. Image Source: MMOGames.com.

A Different Kind Of Social Theory

The fundamental theory behind social networking as an economic engine for profits was pitched to investors not based on extensive academic research or experience, but as an *ex post facto* rationale for why the site's amazing growth could possibly pay off in the future. Zuckerberg's hunch was that users would be more likely to respond favorably to products and services recommended by their friends on-line relative to traditional advertisements.

This fanciful notion resulted in Facebook Beacon, a user tracking program that placed advertisements in users' News Feeds based on their friends' be-

havior starting in late 2007. The program's workings were confusing to users and advertisers alike. As *New York Times* journalist Louise Story reported:⁵⁹

"I was surprised then when I saw the first version of Beacon, because it automatically sent your friends information on your purchases on participating sites, unless you acted to prevent it. It was an opt-out program. (Yesterday, Facebook reversed that policy.)

I'm hardly the only one who found a gap between what Facebook said and what it did. And this may be costing it some of the blue-chip support that it had amassed. Coca-Cola, for example, has decided not to use Beacon for now."

Far from revolutionizing commerce, Beacon was shut down in 2009.60

As Silicon Valley investors, Stanford business school professors and entrepreneurs alike went bananas over the newly-released iPhone, the Facebook Platform also promised to change the way humans interacted with technology. Entire companies such as Zynga emerged out of the ether, producing games with names like Farmville that would addict millions of players, all using the Facebook Platform. An early Facebook App called "SuperPoke" allowed users to throw digital sheep at one another.

Carl Sjogreen, former President of the Harvard Computer Society, led a team of Program Managers at Facebook working on the Platform. In 2012, he summarized the company's goal at a conference: "The point of Open Graph for the sort of everyday Facebook user is a tool to let applications deeply integrate with Facebook and really

⁵⁹ The New York Times, November 30, 2007, "Coke Is Holding Off on Sipping Facebook's Beacon."

https://bits.blogs.nytimes.com/2007/11/30/coke-is-holding-off-on-sipping-facebooks-beacon/ 60 The Telegraph, September 21, 2009, "Facebook shuts down Beacon."

https://www.telegraph.co.uk/technology/facebook/6214370/Facebook-shuts-down-Beacon.html

help sort of fill out your timeline and help enrich your News Feed because you're seeing more information from your friends."⁶¹ Sjogreen referred to a "whole new class of applications" that could improve a user's "Facebook experience."

Six years later, this kind of enrichment would haunt the company, in the form of a bikini photo app on the Facebook Platform whose CEO decided to visit London.

From Russia With ®

In 2006, Facebook, Inc. was granted at least two registered trademarks to the terms THEFACEBOOK and FACEBOOK by the United States Patent and Trademark Office. To obtain these trademark rights, former Facebook, Inc. President Sean Parker de-



On February 18, 2005, Facebook, Inc. President Sean Parker twice declared under penalty of perjury that "to the best of his/her knowledge and belief no other person, firm corporation, or association has the right to use [Facebook] in commerce, either in the identical form thereof or in such near resemblance thereto as to be likely, when used on or in connection with the goods/services or such other person, to cause confusion, or to cause mistake, or to deceive." He and Mark Zuckerberg had spoken with the author of this report about the houseSYSTEM Facebook only weeks prior.

clared under penalty of perjury that he knew of no other organization who had the right to the marks prior to his own. His declarations were false; after they were granted, Think Computer Corporation accordingly petitioned to cancel them.^{62,63}

The trademark dispute was settled unexpectedly in a confidential mediation session in May, 2009,⁶⁴ with Facebook's lawyers suddenly in a rush to wrap up the proceedings. Mark appeared for the beginning of the mediation session, but then left early to attend a meeting, even though mediators typically demand the physical presence of the principals of all parties involved in a dispute. Despite its contractual obligations (in effect violating the agreement the same day it was signed), Facebook posted the press release concerning the settlement after 11:30 P.M. on the Friday before Memorial Day Weekend, ensuring that most journalists

would not actually see it. This would prove to be a familiar pattern for journalists covering the company. $^{\rm 65}$

The following business day, Facebook announced that Russian venture capital firm Digital SkyTechnologies (DST) would be investing \$200 million for a preferred 1.96%

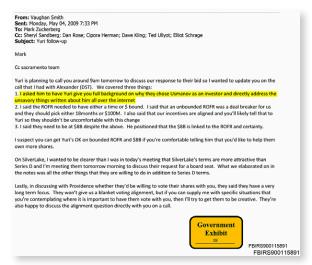
⁶¹ YouTube, February 16, 2012, "Carl Sjogreen, dir of product at Facebook, talking about Ope[n Graph]" https://www.youtube.com/watch?v=WVkGIIf3_Us

⁶² Think Computer Corporation v. Facebook, Inc., USPTO Trademark Trial and Appeal Board, Case No. 92049206-CAN. https://www.plainsite.org/dockets/rqdqkt4r/uspto-trademark-trial-and-appeal-board/think-computer-corporation-v-facebook-inc/

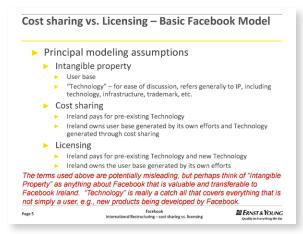
⁶³ Think Computer Corporation v. Facebook, Inc., USPTO Trademark Trial and Appeal Board, Case No. 92050675-CAN. https://www.plainsite.org/dockets/rqwi76bn/uspto-trademark-trial-and-appeal-board/think-computer-corporation-v-facebook-inc/

⁶⁴ Facebook, Inc. Newsroom, May 22, 2009, "Facebook and Think Computer Corporation Resolve Trademark Dispute." https://newsroom.fb.com/news/2009/05/facebook-and-think-computer-corporation-resolve-trademark-dispute/

⁶⁵ The Journal Times, November 28, 2018, "Facebook tries to bury bad news about itself." https://journaltimes.com/opinion/editorial/journal-times-editorial-facebook-tries-to-bury-bad-news-about/article_ e8079ca0-a156-5c9f-8419-b4121c1d1cc3.html



A May 4, 2009 e-mail proves that Mark Zuckerberg and Sheryl Sandberg were fully aware that Facebook might be making a deal with the Russian mafia when Mark agreed to accept a \$200 million investment round from Yuri Milner and Alisher Usmanov. Two weeks later, just before the deal settled, Mark settled two legal disputes with the creator of and company behind houseSYSTEM, which also runs PlainSite.



A slide from an internal August 3, 2010 Ernst & Young presentation illustrates part of its plan to help Facebook evade taxes.

stake in the company. DST, run by Yuri Milner, counted among its limited partners such infamous names as Alisher Usmanov, a Russian oligarch with diverse investments, alleged mafia ties, and a net worth of approximately \$15 billion. In 2017, as part of the international Paradise Papers collaborative journalism project, it was revealed that the DST investment was actually financed by the Kremlin via "VTB, a Russian state-controlled bank often used for politically strategic deals."⁶⁶ The United States Department of the Treasury imposed sanctions on VTB Bank in 2014.⁶⁷

The Facebook trademarks were not only valuable to the company for their protection of its exclusive right to use the generic term "facebook" for social networking, but also as a pretext for the company to evade taxes. The scheme, politely called "Transfer Pricing," works by structuring international subsidiaries that artificially license use of intellectual property, such as patents and trademarks, back to the U.S. corporation that initially owned them for a fee, thereby reducing taxable income. Such schemes are common amongst large companies, but Facebook's tax planning was sufficiently aggressive that the Internal Revenue Service sued.68 Among the documents that surfaced were e-mails from Sheryl Sandberg, who was hired in March 2008 to manage the business and operational affairs Mark found boring. One of her first and lesser-known priorities was apparently moving Facebook's headquarters on paper to a "tiny" office in Ireland so that the company could evade its United States tax obligations.⁶⁹ Facebook also

set up companies in other tax havens, such as Luxembourg and the Cayman Islands.

By the end of the year, Think Computer Corporation had donated 250,000 to Think Computer Foundation, its 501(c)(3) non-profit sister organization. This funding ef-

⁶⁹ United States of America v. Facebook, Inc. and Subsidiaries, California Northern District Court, Case No. 3:16-cv-03777-LB, Document 56-8. https://www.plainsite.org/dockets/download.html?id=252146868&a=8&z=31e928c1



⁶⁶ The New York Times, November 5, 2017, "Kremlin Cash Behind Billionaire's Twitter and Facebook Investments." https://www.nytimes.com/2017/11/05/world/yuri-milner-facebook-twitter-russia.html

⁶⁷ Reuters, July 29, 2014, "U.S. adds VTB, two other banks to Russia sanctions list." https://www.reuters.com/article/us-ukraine-crisis-sanctions-banks/u-s-adds-vtb-two-other-banks-to-russia-sanctions-listidUSKBN0FY23D20140729

⁶⁸ United States of America v. Facebook, Inc. and Subsidiaries, California Northern District Court, Case No. 3:16-cv-03777-LB. https://www.plainsite.org/dockets/304jmbv5l/california-northem-district-court/united-states-of-america-v-facebook-inc-and-subsidiaries/

fectively became the seed investment in PlainSite, and the two entities continue to run PlainSite as a joint venture. 70

The Hollywood Treatment

After six years of the site's growth, 2010 was the year that the legend around Face-



A poster for 2010 film The Social Network. Source: IMDb.

book's creation truly began to take shape. It began with the release on June 8, 2010 of *The Facebook Effect*, a book authored by David Kirkpatrick, a Fortune writer (and different David Kirkpatrick than the *New York Times* international correspondent with the same first and last name), whose research was officially sanctioned by the company. Though houseSYSTEM was briefly mentioned, its creator was never contacted for comment prior to the book's publication. Instead, Sam Lessin, whose CrimsonxChange competed with houseSYSTEM in 2003 and 2004, and whose company drop.io would soon be acquired for \$20 million in Facebook stock, was asked to comment instead:⁷¹

"Today, Zuckerberg won't say much about houseSYSTEM, except that 'the trick isn't adding stuff, it's taking away.' house-SYSTEM eventually disappeared. Zuckerberg classmate Sam Lessin, himself a programmer and now an Internet entrepreneur, recalls it as 'a huge sprawling system that could do all sorts of things.' By contrast, he says, Thefacebook was almost obsessively minimal. 'The only thing you could do immediately was invite more friends. It was that pureness which drove it."

Kirkpatrick was himself dismissive toward houseSYSTEM, singling out a quote from its creator's memoir in an effort to make him appear arrogant and out of touch for worrying so much about privacy:

"In a 333-page self-published, self-justifying autobiography he writes, "I didn't like the idea of working for someone who had just been disciplined for ignoring privacy rights on a massive scale.""

From there, the book went on to extol Zuckerberg's "clearheaded" way of thinking and his maturity in grappling with moral dilemmas, while explaining away some potentially pathological traits as near prerequisites for success.

Kirkpatrick's book was too late for Hollywood. "The Social Network" opened at

⁷⁰ Think Computer Foundation funds were not used for the preparation of this report.

See https://www.plainsite.org/about/jointventure.html for a full explanation of the joint venture arrangement.

⁷¹ Kirkpatrick, David, The Facebook Effect, Simon & Schuster (2010), Pages 81-82.

From: Scott Rudin [mailto:sr@scottrudinproductions.com] Sent: Thursday, May 20, 2010 7:56 AM To: Lynton, Michael; Seligman, Nicole; Pascal, Amy Subject: Fw: Social Network

FYI.

----- Original Message -----From: Scott Rudin To: <u>elliot@facebook.com</u> <<u>elliot@facebook.com</u>> Sent: Thu May 20 07:55:41 2010 Subject: Social Network

Just saw it. Excellent movie. Fincher did brilliantly. Very smart, very funny, extremely entertaining, extremely touching. I think it's genuinely balanced. And Mark is always the smartest, most shrewd, most visionary person in the room. Your big concerns -- his relationship to money, what he actually did. In inventing Facebook, how gifted he is -- all of those are well-handled and articulated as I think you would want them to be. It's not a love letter and nobody would believe a word of it if it were one -- but I think you will actually like and maybe even admire it. I think -- I think and I hope -- it's what I told you to expect. And it's exactly the script, too.

An e-mail thread leaked from Sony in 2014 in which producer Scott Rudin e-mails Facebook PR executive Eliot Schrage to report that "Mark is always the smartest, most shrewd, most visionary person in the room...as I think you would want." Sony executives Michael Lynton and Amy Pascal were sent a forwarded copy of the message.



Facebook employees flood a movie theater to view "The Social Network." Source: Mashable.

the box office just four months later, on October I, 2010. The critically acclaimed movie's Storyline on the Internet Movie Database (IMDb) opens as follows: "On a fall night in 2003, Harvard undergrad and computer programming genius Mark Zuckerberg sits down at his computer and heatedly begins working on a new idea..." This rose-colored view of the story came about thanks to controversial author Ben Mezrich, whose 2009 book *The Accidental Billionaires* was optioned by Sony Pictures specifically to make the film.

The enormous leak of Sony data from 2014, courtesy of North Korea, provided new insights into how The Social Network actually came to be. While there were internal battles over how accurate the film needed to be—for example, a dispute arose over such details as whether Mark

should be portrayed programming Facemash after drinking beer (as he did in real life) or a screwdriver—a private e-mail on September 30, 2010 to Patrick Goldstein at the *Los Angeles Times* responding to his column hinted at bigger problems. "[We] are certain The Social Network is a nonfiction movie. FACTS ARE FACTS. THEY'RE IR-REFUTABLE AND THE MOVIE IS FLUSH WITH THEM." Regarding Mark's AIM conversations obtained by *Business Insider*, Scott Rudin and his team wrote in a draft message, "I didn't use this damning information [DELETE: the IM's] in the movie--not

because I'm a nice guy but because the movie would have been over at the beginning of the second act. These IM's *[sic]* demonstrate beyond any doubt the fundamental truths that Facebook would like us to believe are fiction."

Actively omitting Mark's IM conversations—not to mention houseSYSTEM and BuddyZoo, Mark Zuckerberg's two main inspirations—fundamentally changed the tone of the movie from what might have been a horror flick to something more like a Greek play about a tragic hero destined to conquer his enemies: the hulking, villainous twins and their preppy friend. The impressive physiques of the Olympic rower Winklevoss twins distracted from something else, however—something that might have tipped off audiences to the fact that the storyline was not quite right. Despite being central to the plot, nowhere in the film does an image of the Harvard Connection website ever appear. That's because even in March 2004, Harvard Connection barely resembled the structure or the user interface of The Facebook. Had it shown up, the ConnectU case would have appeared laughable, making the entire movie seem pointless without anything else to latch on to.

The 2014 Sony leak also supported reporting from *The Wall Street Journal* pointing out that although Facebook did not have editorial control over the movie script, it did have "input."⁷² Facebook Vice President Elliot Schrage was successful enough at influencing the film's narrative that Facebook employees were ultimately shown the movie during work hours, with the company's initial protests long forgotten.⁷³

Although the movie omitted some of *The Accidental Billionaires*'s most egregious lies^{74,75}—Mezrich was apparently late delivering a script, forcing Aaron Sorkin to begin writing on his own—the treatment of Zuckerberg as something of a hero aligned closely with Mezrich's portrayal of Mark as a visionary computer genius. By the end of the movie, the audience was left with the sense that Mark was just a good kid at heart. And though its producers emphasized that the script was "flush with facts," they also took plenty of liberties, most of which worked in Facebook's favor.

The film had truly damaging long-term effects, winning over everyone from high school students in awe of Zuckerberg's legend to ultra-wealthy bank executives, such as Capital One CEO Richard Fairbank, who in October 2011 told a rapt audience at Stanford University that he had been inspired by the movie and its software prodigy protagonist. Across the world, the film's story became the de facto history of Facebook's birth, and those who dared question its telling were ridiculed and summarily dismissed. Scott Rudin and Aaron Sorkin are apparently interested in writing a sequel.

Facebook Goes Public

The Wall Street Journal also confirmed that Facebook executives viewed the film as a potential stepping stone to an IPO, quoting producer Scott Rudin as saying, "They

⁷² The Wall Street Journal, September 24, 2010, "For Facebook, Movie Damage Control." https://www.wsj.com/articles/SB10001424052748704062804575510230514927218

⁷³ *Mashable*, October 1, 2010, "Facebook Staff Takes a Company Field Trip to See "The Social Network." https://mashable.com/2010/10/01/facebook-staff-social-network-screening/

⁷⁴ The author of this report filed suit against Ben Mezrich, his company, and Sony Pictures in Massachusetts District Court in 2011 over *The Accidental Billionaires* and The Social Network. The suit was dismissed by Magistrate Judge Collings who had also previously dismissed the ConnectU claims before he was reversed on appeal—without any opportunity to amend the complaint. In the world of federal litigation, this kind of summary dismissal with no opportunity to amend whatsoever is extremely rare as it violates the law. Judge Collings retired immediately after preventing the case from moving forward. Seven years later, Mezrich admitted that, "Our relationship with Facebook is kind of built on lies a little bit" on CNBC. See https://www.cnbc.com/video/2018/03/23/our-relationship-with-facebook-is-based-on-lies-saysauthor.html. See also *Greenspan v. Random House, Inc. et al*, Massachusetts District Court, Case No. 1:11-cv-12000-RBC. https://www.plainsite.org/dockets/8l0iwprb/massachusetts-district-court/greenspan-v-random-house-inc-et-al/

⁷⁵ In December 2010, Sony Pictures and Random House jointly agreed to issue a \$1 million payment (\$850,000 coming from Sony Pictures, \$150,000 from Random House) to Eduardo Saverin's ex-girlfriend based on the portrayal of her in the movie—before she filed suit for libel.



Mark Zuckerberg applauds the company's listing on the NASDAQ alongside Sheryl Sandberg and Nasdaq OMX Group CEO Robert Greifeld on May 18, 2012. Source: CNBC/Getty Images

were trying to figure out a way not to tie Mark's personal identity to the identity of the company, because they were and are talking about an inevitable IPO and clearly want the company to be bigger than Mark Zuckerberg."

With pressure building to accommodate an ever-growing number of investors, the company went public on May 18, 2012 with the NASDAQ ticker FB. After overcoming some initial troubles involving the NASDAQ itself on its opening day resulting in a lawsuit that later settled for \$35 million,⁷⁶ the stock traded in a relatively straight line

upward until January 2018.

Trading on public markets put new pressures on the company to meet or exceed Wall Street's expectations on a quarterly basis. According to an interview with PBS *Frontline*, COO Sheryl Sandberg held a meeting in 2012 in which it was made clear that Facebook's advertising revenue figures were not nearly as exciting as the investing public believed.⁷⁷ Without data on users' actual purchases, the types of targeted fields listed on Eduardo Saverin's 2004 Media Kit were not of interest to major advertisers. To meet expectations, the business model changed dramatically. Facebook began purchasing information from data brokers such as Axciom and Experian to merge with its own profile information, thus transforming the company into a surveillance engine of unprecedented scale. The "Like" button's proliferation across the internet was also used to monitor users, even when they weren't signed in to Facebook or hadn't signed up at all. Suddenly, Facebook could give advertisers everything they wanted to know and more—but the company was still on a never-ending treadmill with Wall Street demanding results.

It worked like magic for six years. The stock surged to a high of \$218.62 per share on July 25, 2018. Then, the company had an earnings call on which Mark Zuckerberg warned that growth might have reached its peak. The next day, July 26th, FB common shares plummeted to \$176.26, down 19.37%. The fall was the single largest drop for a single company's market capitalization in history, losing \$120 billion in a day.⁷⁸

Perceived Market Advantages

Even with its mis-steps, Facebook is widely considered one of the most successful companies in history for a reason: practically everyone on the planet has heard of

⁷⁶ Reuters, February 26, 2018, "Facebook settles lawsuit over 2012 IPO for \$35 million."

https://www.reuters.com/article/us-facebook-settlement/facebook-settles-lawsuit-over-2012-ipo-for-35-million-idUSKCN1GA2JR 77 Frontline, October 29-30, 2018, "The Facebook Dilemma," Part One, 26:10.

https://www.pbs.org/wgbh/frontline/film/facebook-dilemma/

⁷⁸ The New York Times, July 26, 2018, "Facebook's Stock Plunge Shatters Faith in Tech Companies' Invincibility." https://www.nytimes.com/2018/07/26/business/facebook-stock-earnings-call.html

it. After a decade and a half of the "hype" that Mark suggested would be necessary in 2004, the bull case for Facebook hardly needs another airing—even some short sellers are singing the company's praises⁷⁹—but a few points are worthy of emphasis.

Network Effects and Lock-In

Facebook has an enormous user base. That's because social networks of all kinds have the ability to grow quickly as they take advantage of network effects: each time one person refers another, the product becomes more useful and valuable for all. Multi-Level Marketing (MLM) schemes try to leverage these same network effects to amass as many members as possible (though they tend to work from the top down).

Lock-in refers to the cost of leaving the network or moving to a different one. Facebook benefits both from network effects and lock-in. With forced delays, suggestions of merely "disabling" one's account temporarily, and frightening dialog boxes, the company makes it incredibly difficult for users to delete profiles. Many users, even if wary of the site, still choose to keep a profile active "just in case."

Platform Diversity

Facebook is no longer a single website or even mobile app. In keeping with Mark's interest in building a better AIM, WhatsApp, Instagram and Oculus are helping to fuel the company's growth. Even as the core Facebook site and application dwindle in popularity, Instagram and WhatsApp especially still remain very popular.



CNBC, including "Mad Money" host Jim Cramer, has been quite friendly toward Facebook, Inc.

Brand Recognition

Facebook is known everywhere around the world and its software is available in many languages. Even in countries where Facebook has little to gain in the form of profits, its brand is strong.

Establishment Credentials

In December, 2013, Facebook, Inc. was added to the S&P 500 stock index. Throughout 2016-2018, Facebook was also the "F" in the so-called "FAANG trade," which involved buying stocks in an unofficial basket of large technology companies: Facebook, Apple, Amazon, Netflix and Google. Mainstream media companies such as CNBC and Bloomberg hyped the FAANG trade to retail inves-

79 Citron Research, December 26, 2018, "Citron Research Backing Up The Sleight On Facebook - 2019 S&P Stock Of The Year" https://citronresearch.com/citron-research-backing-up-the-sleigh-on-facebook/

tors almost daily, pushing up the value of leading technology stocks. The NASDAQ peaked at 8,133.30—over 3,000 points above its dot-com bubble high—on August 31,2018. Unsurprisingly, as a subset of technology shares, FAANG stocks performed remarkably well during this period.

Cult Status

Thanks to an effective public relations campaign spanning years, Facebook's CEO, and to some extent, its COO, Sheryl Sandberg, benefit from the cult status that often surrounds billionaires. No matter what decisions are made, investors are willing to effusively applaud or are willing to forgive, simply because the principals are unfathomably rich. This constant adulation helps the company's stock price stay up.

A Captive Press

Facebook has done a phenomenal job at weaving its technology into all sorts of websites that it has nothing to do with, and especially newspapers. Many sites offer users the ability to sign in with their Facebook accounts as a matter of convenience. Providing this offering requires that Facebook have at least some integration with the host website's code, providing a hook for tracking and analysis.

At the same time, more users than ever get their news from Facebook, which is itself the source of significant controversy. Practically speaking, this means that visits to a media outlet's website largely depend on a given article from that newspaper appearing on Facebook first with prominent placement. This dynamic of simultaneous dependence and competition makes editors and producers at newspapers and television stations extremely wary of publishing anything critical of the company.

In Facebook's early days, as previously discussed, hardly anything negative made it into print about the company or Mark Zuckerberg at all, unless the story had something to do with the ConnectU litigation. Even now, certain words to describe Zuckerberg are still off limits at large newspapers that determine which news is fit to print.

Stock Buybacks

Like many large companies, Facebook has been taking advantage of the Tax Cuts and Jobs Act of 2017, passed by the Republican party, to buy back its own stock. In the first three quarters of 2018, Facebook repurchased \$9.39 billion of its own common stock,⁸⁰ up from \$2.07 billion for all of 2017.⁸¹ At the end of 2018, Facebook, Inc. issued an SEC Form 8-K stating that it had authorized an additional \$9 billion in stock

⁸⁰ SEC Form 10-Q, September 30, 2018, Page 20.

https://www.sec.gov/Archives/edgar/data/1326801/000132680118000067/fb-09302018x10q.htm 81 SEC Form 10-K, December 31, 2017, Page 50.

https://www.sec.gov/Archives/edgar/data/1326801/000132680118000009/fb-12312017x10k.htm

buybacks.⁸² With a market capitalization of approximately \$400 billion, the extra purchases might help boost the stock price slightly.

Unrecognized Risks

1.1K - 62 - SHARE - SAVE

Mark Zuckerberg

No matter the company's business model, consumers will still be at risk if Mark Zuckerberg is in charge. Like many successful technology chief executives—and even the



Zuck gets blasted on Capitol Hill

A YouTube video posted by media outlet c|net inexplicably refered to a 34-year-old billionaire with a questionable past using the kind of nickname reserved for a close friend or next-door neighbor. Here, Zuckerberg is testifying before Congress in April 2018. nominal President of the United States, Donald John Trump—Mark Elliot Zuckerberg has a documented habit of lying and putting himself above the law. Zuckerberg, who has encouraged the use of the nickname "Zuck" to soften his image as a youthful, harmless techie, is without question the biggest risk to Facebook, Inc., while simultaneously being inseparable from it.

On April 9, 2018—just before Mark was called to testify before Congress on his company's persistent troubles—the *Washington Post* published a timeline entitled, "14 years of Mark Zuckerberg saying sorry, not sorry."⁸³ On a trip back to Harvard College years prior, Mark openly admitted to Computer Science 50 students that he simply did

whatever he wanted to, consequences be damned. In his words, "A lot of times, people are just like, too careful. I think it's more useful to like, make things happen, and then like, apologize later, than it is to make sure that you dot all of your 'I's now, and then just not get stuff done."⁸⁴

In June 2004, Mark thought that only a select few met these exacting standards.

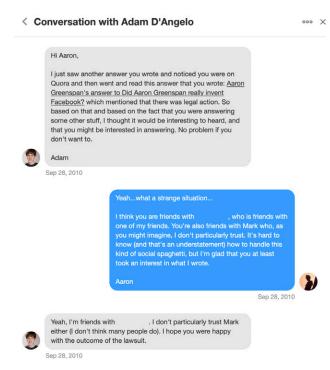
zberg02: there are only like six people in the world who have decent ideas
ThinkComp: haha
zberg02: and it's the job of the rest of the people to accuse us of taking their ideas haha
zberg02: while we just continually kick ass
zberg02: there's only six

https://www.sec.gov/Archives/edgar/data/1326801/000132680118000069/form8-k12072018.htm
 The Washington Post, April 9, 2018, ''14 years of Mark Zuckerberg saying sorry, not sorry.''

⁸² SEC Form 8-K, December 6, 2018.

https://www.washingtonpost.com/graphics/2018/business/facebook-zuckerberg-apologies/
 Frontline, October 29-30, 2018, "The Facebook Dilemma," Part One, 4:10.

https://www.pbs.org/wgbh/frontline/film/facebook-dilemma/



Two years after leaving, Adam D'Angelo, former Facebook CTO and high school friend of Mark Zuckerberg admitted, "I don't particularly trust Mark either," adding, "I don't think many people do." Today, millions of investors who own Facebook common stock, but who don't truly understand the company, trust Mark with their money.

zberg02: i'm telling you

zberg02: i still need to meet the other three though

ThinkComp: do you have names in mind

zberg02: well i'd like to think i'm okay

zberg02: you're good

zberg02: there's this kid out in caltech who's sick zberg02: and that's like it for people in college right now

ThinkComp: what's the caltech kid's name

zberg02: adam dangelo

zberg02: he taught me most of what i know haha zberg02: for every good thing i make he has like six

Today, the two students Mark once respected so much have both lost trust in him. Adam D'Angelo left Facebook in 2008.

He's not the only one who has left. Throughout his tenure as CEO, Mark's reckless behavior led to several more key departures: Dustin

Moskovitz, Chris Hughes, Andrew McCollum, Owen Van Natta, Gideon Yu, Brendan Iribe (Oculus), Jan Korum (WhatsApp), Kevin Systrom (Instagram), Mike Krieger (Instagram), Elliot Schrage, Alex Stamos, Dan Rose, and Colin Stretch, among others. And of course, Mark was extremely effective at preventing those who disagreed with his views from ever gaining a foothold at the company in the first place. In 2013, the job review site Glassdoor indicated a 99% approval rating, suggesting especially strong Kool-Aid at Facebook headquarters and/or a CEO comfortable with staged reviews.

Other employees remain only thanks to Mark's protective power, such as Andrew Bosworth, a former Harvard student and notorious Computer Science 50 teaching fellow who joined Facebook and became one of the company's top lieutenants.⁸⁵ In 2016, Bosworth penned an especially insensitive memo entitled "The Ugly" in which he justified Facebook's growth-at-any-cost approach—even in the face of murder. After the memo leaked, Bosworth was forced to claim that he never believed what he wrote.

Mark poses a danger to Facebook, Inc. because he has begun to believe in his own lies. His motto of "move fast and break things" resonated with many in Silicon Valley—so

⁸⁵ BuzzFeed News, March 29, 2018, "Growth At Any Cost: Top Facebook Executive Defended Data Collection In 2016 Memo — And Warned That Facebook Could Get People Killed. https://www.buzzfeednews.com/article/ryanmac/growth-at-any-cost-top-facebook-executive-defended-data

many, that his site ended up breaking American democracy. When Zuckerberg was asked if Facebook bore any responsibility for the election issues in November 2016,⁸⁶ he responded, "Personally I think the idea that fake news on Facebook, which is a very small amount of the content, influenced the election in any way—I think is a pretty crazy idea. Voters make decisions based on their lived experience."⁸⁷ He was later forced to walk the comments back.⁸⁸

Then the Cambridge Analytica scandal hit in March 2018. Facebook executives were completely silent for days after the news broke. Finally, Mark appeared on CNN, where he effectively used his children as human shields to deflect criticism from a sympathetic news anchor whose questions had been approved ahead of time. As a middle-aged man, Mark could still barely keep it together enough to answer questions unless he had complete control over the situation.

But thanks to his obsessively narrow focus on growth and his lack of knowledge about much of the modern world, Mark lost control over Facebook years ago.

Fake Accounts

On February 10, 2014, a science education account on YouTube called Veritasium (no relation to Harvard, whose motto is the Latin "veritas") posted a video simply called "Facebook Fraud." Its host, Derek Muller, Ph.D., departed from his typical video content to highlight a trend he had noticed after paying for advertising campaigns on



Derek Muller, Ph.D., a physics educator, explaining how Facebook had been defrauding him on his YouTube channel, Veritasium.

Facebook: likes appearing from strange accounts in Egypt, Bangladesh, Sri Lanka, and other unexpected places that he had not targeted.⁸⁹

Muller reported that Facebook's attempts to address the problem of fake accounts were "not even close" to solving the issue, which he was familiar with, because "most of the likes on my Facebook page are not genuine." He pointed out that "a rising number of fans can result in a drop in engagement" as a result of Facebook's algorithms measuring how interested users are in a given piece of content. He also noted that

failure for an advertiser meant huge success for Facebook, which could charge both for an initial advertisement and again for a "promoted post" to make up for the ad-

⁸⁶ At the time, Zuckerberg was speaking at a "Technonomy" conference organized by David Kirkpatrick, whose hagiographic book *The Facebook Effect* helped pave the way for critical acceptance of Mark as a "leader" in 2010.

⁸⁷ The Verge, November 10, 2016, "Zuckerberg: the idea that fake news on Facebook influenced the election is 'crazy.'" https://www.theverge.com/2016/11/10/13594558/mark-zuckerberg-election-fake-news-trump

⁸⁸ The Guardian, September 27, 2017, "Mark Zuckerberg: I regret ridiculing fears over Facebook's effect on election." https://www.theguardian.com/technology/2017/sep/27/mark-zuckerberg-facebook-2016-election-fake-news

⁸⁹ YouTube, February 10, 2014, "Facebook Fraud." https://www.youtube.com/watch?v=oVfHeWTKjag

vertisement's lack of effectiveness.

At the time, Muller's was a relatively lone voice on a single YouTube channel, though it did lend some credence to a 2013 Forrester Research report making similar but less specific claims.⁹⁰ In the words of Forrester's Nate Elliott, "Our surveys show that Facebook creates less business value than any other digital marketing opportunity."

More recently, on December 26, 2018, *New York Magazine* published an article by Max Read called "How Much of the Internet Is Fake? Turns Out, a Lot of It, Actually."⁹¹ According to Read,

"not even Facebook, the world's greatest data-gathering organization, seems able to produce genuine figures. In October, small advertisers filed suit against the socialmedia giant, accusing it of covering up, for a year, its significant overstatements of the time users spent watching videos on the platform (by 60 to 80 percent, Facebook says; by 150 to 900 percent, the plaintiffs say). According to an exhaustive list at MarketingLand, over the past two years Facebook has admitted to misreporting the reach of posts on Facebook Pages (in two different ways), the rate at which viewers complete ad videos, the average time spent reading its "Instant Articles," the amount of referral traffic from Facebook to external websites, the number of views that videos received via Facebook's mobile site, and the number of video views in Instant Articles."

This article garnered the attention of some prominent names in Silicon Valley and the advertising industry, including Aram Zucker-Scharff, Director for Advertising Technology at *The Washington Post*—where Mark Zuckerberg found an early supporter in publisher and former *Harvard Crimson* president Donald E. Graham, who would later join the company's Board of Directors. As Zucker-Scharff wrote,⁹²



"The numbers are all fking fake, the metrics are bullshit, the agencies responsible for enforcing good practices are knowing bullshiters enforcing and profiting off all the fake numbers and none of the models make sense at scale of actual human users."

Ellen Pao, a former venture capitalist at top-tier firm Kleiner Perkins Caulfield and Byers, as well as former CEO of Reddit, agreed. On her Twitter account, Pao wrote,⁹³



"It's all true: Everything is fake. Also mobile user counts are fake. No one has figured out how to count logged-out mobile users, as I learned at reddit. Every time someone switches cell towers, it looks like another user and inflates company user metrics, and if an unlogged-in user uses the site on multiple devices, each device counts as a unique

⁹⁰ Forrester Research, Inc., October 28, 2013, "Why Facebook Is Failing Marketers."

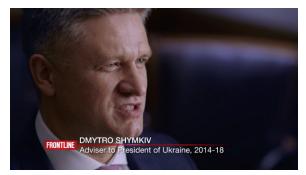
⁹¹ New York Magazine, December 26, 2018, "How Much of the Internet Is Fake? Turns Out, a Lot of It, Actually." http://nymag.com/intelligencer/2018/12/how-much-of-the-internet-is-fake.html

^{92 @}Chronotope,Twitter, December 26, 2018. https://twitter.com/Chronotope/status/1078003966863200256

^{93 @}ekp, Twitter, December 26, 2018. https://twitter.com/ekp/status/1078095527420383233

user."

While these tweets found a following on social media, stock analysts hardly noticed. But the issues had been percolating for years.



Dmytro Shymkiv explaining his government's frustration with Facebook, which ignored fake accounts. Source: PBS Frontline

For its two-part series "The Facebook Dilemma," PBS *Frontline* interviewed Dmytro Shymkiv, deputy head of the Presidential Administration of Ukraine,⁹⁴ who has advised Ukrainian president Petro Poroshenko since 2014. Regarding Russian propaganda influencing Ukrainian public opinion, he stated that representatives from Facebook were completely unwilling to take any action.

"When I said, but this is fake accounts—[nervous laughter] you can verify that—[Facebook's response

was,] 'well, we'll think about this, but you know, we have freedom of speech and we are a very pro-democracy platform; everybody can say anything...' I was explicitly saying that there are trolls factory, that there are posts and news that are fake, that are lying, and that they are promoted on your platform, by very often fake accounts. Have a look! At least send in someone to investigate!"

No one did. In Shymkiv's words, "For them, at that time, it was not an issue."

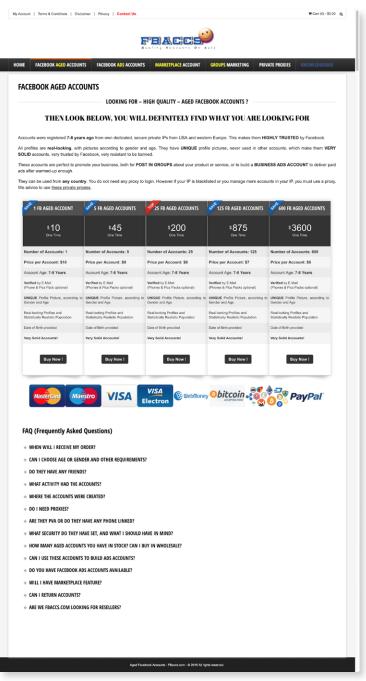
As Russia was employing young, English-speaking citizens in squat buildings to meddle with its neighbors on Facebook, on April 20, 2015, *The New Republic* published an article entitled, "The Bot Bubble" by Doug Bock Clark.⁹⁵ The article spelled out how click farms in the Philippines would go about registering "thousands of additional SIM cards…taped into bricks and stored under chairs, on top of computers, and in old instant noodle boxes around the room" in order to create fake Facebook accounts by the thousands. A single click farm profiled in the article employed 17 people each registering 150 fake accounts per day, or 2,550 fake accounts per day in total. These accounts could then be sold to whomever wanted to buy them.

Today, a search of the phrase "buy Facebook accounts" on any popular search engine returns thousands of results, such as the websites https://fbaccs.com and https://pvafb. com (both with their own SSL certificates). These sites—and hundreds if not thousands of others—offer ready-made Facebook accounts set up by enterprising merchants around the world for only a few dollars per account. Some of them are "aged" to give the appearance of legitimacy, while others are verified by e-mail and/or SMS

⁹⁴ Frontline, October 29-30, 2018, "The Facebook Dilemma," Part One, 48:05. https://www.pbs.org/wgbh/frontline/film/facebook-dilemma/

⁹⁵ The New Republic, April 20, 2015, "The Bot Bubble."

https://newrepublic.com/article/121551/bot-bubble-click-farms-have-inflated-social-media-currency



Although Facebook has apologized and pledged repeatedly to clean up its act, fake Facebook accounts are still easily available to anyone who wants to buy them. This site has been online since 2015.

message to convince Facebook that a real person is behind them. In fact, as The New Republic illustrated, one real person could be behind 10,000 accounts.

For a businessman in Dhaka, Bangladesh or Cairo, Egypt, selling fake Facebook accounts offers a quick and easy way to earn valuable United States dollars. For a buyer, the accounts can be used for anything: rigging bank-sponsored contests for huge cash prizes,⁹⁶ internet harassment,⁹⁷ state-sponsored propaganda,⁹⁸ cryptocurrency promotion and/or theft,99 stock pump-anddump schemes, or just anonymous browsing. To be fair, law enforcement agencies also use fake accounts sometimes to promote the rule of law, but the overwhelming majority of usage is nefarious.

Buying fake accounts works. According to an anonymous representative of FBaccs.com, "We build our own Ads accounts, using our own Aged accounts. Follow common rules to manage Aged accounts, and specially, the common sense, we have a very few percentage of accounts locked (less than 1%)." In other words, this site claims that Facebook does not catch 99% of its fake accounts. Another site called ACCSmarket.com, available in Russian and English, explains on a page called "RECOMMENDATIONS FOR

- 96 ProPublica, December 10, 2018, "Unprotected: How the More Than Me Charity Gamed the Internet and Hollywood to Win a Million Dollars.
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- https://www.reuters.com/article/us-saudi-khashoggi-disinformation/fake-news-network-vs-bots-the-online-war-aroundkhashoggi-killing-idUSKCN1N63QF
- 99 The Verge, December 18, 2018, "Facebook imposters are trying to swindle users out of bitcoin." https://www.theverge.com/2018/12/18/18146406/facebook-pages-imposters-bitcoin-cryptocurrency



WORK WITH FACEBOOK" how to bypass Facebook's rudimentary security checks:

"-if you have an profile page and photos on your account, then you can send something to check for it. Previously, it's better to save the photo in any graphic editor.

-if there are no photos and profile page on the account (or there is only an avatar), then you can take any photo of a person from the Internet (example: take a photo from someone else's Twitter profile) and send it for verification.

As practice has shown, 90% of sent self-successfully pass the test within 2 days and you again get access to your account."¹⁰⁰

Reports of Facebook's poor reporting about fake accounts have been scattered over the years and ignored by the mainstream press. After each article or lawsuit, the company has made some effort to address the specific problem mentioned, but the media has missed the forest for the trees, often repeating the company's claim of having 2 billion active users, or nearly a third of the world's population. Documents and common sense suggest otherwise.

The author of this report followed up with Mark on August 21, 2005 in one of the last relevant AIM conversations recorded. The conversation revealed Zuckerberg's thoughts on the inherent tradeoff between quantity and quality: he could have a network that was large, or a network that was trustworthy, but not both. At their outset, both houseSYSTEM and The Facebook were exclusively available to individuals with a harvard.edu e-mail address, but The Facebook's policies quickly relaxed. By September 2006 anyone could join. Undesirable content was inevitable.



ThinkComp: i still think you could have something amazing by integrating my email thing into your site

ThinkComp: because there's absolutely no spam zberg02: how do you prevent it ThinkComp: it doesn't run on SMTP ThinkComp: it's just a giant mysgl table type spam-free ThinkComp: but with embedded rules to prevent illegitimate mass mailing ThinkComp: which SMTP lacks ThinkComp: and you already have the most difficult part, identity verification, complete ThinkComp: because you've been restricting usage by domain ThinkComp: it would be the largest spam-free email network around zberg02: but people could only email others on the network?

ThinkComp: that murdoch definitely wouldn't

zberg02: why your email?



e-mail system.

¹⁰⁰ ACCSmarket.com. https://accsmarket.com/en/fbrecommendations

ThinkComp: you can email outside the network, but the person has to join before they can read it

ThinkComp: otherwise the message basically just sits till the person signs up

ThinkComp: because the whole system depends on identity verification

ThinkComp: and the idea of enforcement--you spam, your account takes a hit

ThinkComp: i think, though, the in/out-of-network issue can work both ways depending on the size of the network to start

ThinkComp: when it's tiny, it's a disincentive to have to join

ThinkComp: but when it's large, there's actually an incentive

ThinkComp: your network is pretty large

ThinkComp: obviously

zberg02: yea

zberg02: i have issues with being too protective in a competitive environment though

zberg02: it also seems like the game becomes that you have to get as many people in as quickly as possibe

zberg02: and not put barriers in the way

ThinkComp: why's that

ThinkComp: i mean, as quickly as possible

ThinkComp: and as far as barriers go, there would be no harm in allowing all outgoing SMTP mail, and automatically using a user's friend list as an incoming SMTP whitelist

zberg02: hey sorry i didn't mean to stop responding

zberg02: there are just a lot of people around and we're doing design stuff

ThinkComp: np, sorry

zberg02: don't apologize

zberg02: i'm going to focus on that stuff though

zberg02: we'll speak soon

ThinkComp: ok

ThinkComp: good luck on the design front

ThinkComp: i'm happy to beta test

zberg02: okay we're testing it tomorrow

zberg02: if you're online i'll send you a link

ThinkComp: cool

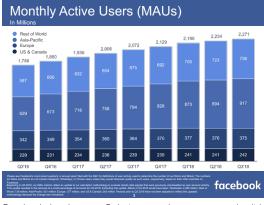
Clearly, Mark viewed "the game" as growing as fast as possible, and he won—except that to achieve Facebook's spectacular growth, he let people cheat. A lot.

Mark let so many people cheat, for so long, across so many time zones, that he may have (at first) inadvertently created the largest scam in history: a company selling advertising to hundreds of millions of phantom buyers—users who do not actually exist. These users may "click" and "like," but ultimately want for nothing and will buy nothing.

Facebook Q3 2018 Results

facebook

investor.fb.com



Facebook, Inc. Investor Relations produces a quarterly slide deck with a disclaimer page at the end of each document. The disclaimers are important.

At some point, Facebook's lawyers realized what was happening, and began attempting to protect the company with cleverly worded disclaimers whose clever wording started to shift quarterly, until it appeared better that it didn't.

Each quarter, Facebook, Inc. publishes a slide deck for its investors that contains a number of graphs and allimportant metrics, such as Daily Active Users (DAUs) and Monthly Active Users (MAUs). Traditionally, the last page of this document has been reserved for legal disclaimers. The majority of the disclaimers on that page—the ones so important that they appear separate and apart from the SEC Form 10-Q—relate to the company's treatment of the fake account problem.

Based upon the slide decks available on the company's Investor Relations website, Facebook has a potentially catastrophic and growing problem with fake accounts, which could be the underlying reason for so many of the company's (and Mark Zuckerberg's) questionable behaviors. Not unlike a Ponzi scheme trying to always bring in new cash to replace outflows, Facebook has needed to find new warm bodies to replace the inevi-

table decline of its product's popularity and achieve its all-important growth metrics.¹⁰¹

In this report, we will use the term "fake" to mean a user account not directly and uniquely correlated with a single human being. In other words, if Jane Harvard signed up herself and her dog, Jane's account would be real, but the dog's account would be fake.

In Q2 2017, the company disclosed its numbers from a year prior in 2016, pegging "duplicate" accounts at 6% of worldwide MAUs and "user-misclassified and undesirable" accounts at 1% of worldwide MAUs. Combined, one can conclude that Facebook claims 7% of MAUs were fake in 2016. The next quarter, in Q3 2017, those figures suddenly for some undisclosed reason reflected the then-current quarter—as opposed to the prior year, and thus skipped data for two quarters completely. The numbers jumped to 10% and "2-3%" respectively. Combined, one can conclude that Facebook claims up to 13% of MAUs were fake in Q3 2017. In Q4 2017, the duplicate accounts figure stayed the same at 10%, but the company introduced a new label, "false accounts," with an even higher number: "3-4%." Combined, one can con-

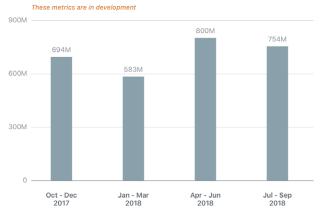
¹⁰¹ In an amusing coincidence, while the company has been searching the globe for willing new users, Facebook, Inc. board member Peter Thiel has been likened to a vampire owing to his interest in using the blood of young people to achieve health benefits. See Vanity Fair, August 1, 2016, "Peter Thiel Wants To Inject Himself With Young People's Blood." https://www.vanityfair.com/news/2016/08/peter-thiel-wants-to-inject-himself-with-young-peoples-blood

Table 1: Facebook, Inc. Investor Slide Deck Disclaimer Comparison

Period	Investor Slide Deck Disclaimer (Emphasis Added)
Q2 2017	In 2016, we estimate that "duplicate" accounts (an account that a user maintains in addition to his or her principal account) may have represented approximately 6% of our worldwide MAUs. We also seek to identify "false" accounts, which we divide into two categories: (1) user-misclassified accounts, where users have created personal profiles for a business, organization, or non-human entity such as a pet (such entities are permitted on Facebook using a Page rather than a personal profile under our terms of service); and (2) undesirable accounts, which represent user profiles that we determine are intended to be used for purposes that violate our terms of service, such as spanming. In 2016, for example, we estimate user-misclassified and undesirable accounts may have represented approximately 1% of our worldwide MAUs. However, these estimates are based on an internal review of a limited sample of accounts and we apply significant judgment in making this determination, such as identifying names that appear to be fake or other behavior that appears inauthentic to the reviewers. Our estimates may change as our methodologies evolve, including through the application of new technologies, which may allow us to identify previously undetected false or duplicate accounts and improve our ability to evaluate a broader population of our users. As such, our estimation of duplicate or false accounts may not accurately represent the actual number of such accounts
	The methodologies used to measure user metrics may also be susceptible to algorithm or other technical errors. Our estimates for revenue by user location and revenue by user device are also affected by these factors. For example, in late 2015, we discovered an error in the algorithm we used to attribute our revenue by user geography. While this issue did not affect our overall worldwide revenue, it did affect our attribution of revenue to different geographic regions. The fourth quarter of 2015 revenue by user geography amounts were adjusted to reflect this reclassification.
	We regularly review our processes for calculating these metrics, and from time to time we may discover inaccuracies in our metrics or make adjust- ments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccuracies or adjustments are immaterial unless otherwise stated. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.
Q3 2017	In the third quarter of 2017, we calculated these estimates using a new methodology for duplicate accounts that included improvements to the data signals we rely on to help identify such accounts. As a result, we estimate that <u>duplicate accounts may have represented approximately 10% of our worldwide MAUs</u> . We believe the increase in this estimate from our prior estimate of duplicate accounts is primarily due to implementation of this new methodology. We also believe the percentage of duplicate accounts is meaningfully higher in developing markets such as India, Indonesia, and the Philippines, as compared to more developed markets. In the third quarter of 2017, we estimate that <u>user-misclassified and undesirable accounts</u> in the creation of such accounts, which we observed in the third quarter of 2017 and which we have seen originate more frequently in specific countries such as Indonesia and Vietnam
	The methodologies used to measure user metrics may also be susceptible to algorithm or other technical errors. Our estimates for revenue by user location and revenue by user device are also affected by these factors. For example, in late 2015, we discovered an error in the algorithm we used to attribute our revenue by user geography. While this issue did not affect our overall worldwide revenue, it did affect our attribution of revenue to different geographic regions. The fourth quarter of 2015 revenue by user geography amounts were adjusted to reflect this reclassification.
	We regularly review our processes for calculating these metrics, and from time to time we may discover inaccuracies in our metrics or make adjust- ments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccuracies or adjustments are immaterial unless otherwise stated. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.
Q4 2017	In the fourth quarter of 2017, we estimate that duplicate accounts may have represented approximately 10% of our worldwide MAUs. We believe the percentage of duplicate accounts is meaningfully higher in developing markets such as India, Indonesia, and the Philippines, as compared to more developed markets. In the fourth quarter of 2017, we estimate that false accounts may have represented approximately 3-4% of our worldwide MAUs. Our estimation of false accounts can vary as a result of episotic spikes in the creation of such accounts, which we have seen originate more frequently in specific countries such as Indonesia, Turkey, and Vietnam. From time to time, we may make product changes or take other actions to reduce the number of duplicate or false accounts among our users, which may also reduce our DAU and MAU estimates in a particular period
	We regularly review our processes for calculating these metrics, and from time to time we may discover inaccuracies in our metrics or make adjust- ments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccu- racies or adjustments are immaterial unless otherwise stated. We intend to disclose our estimates of the number of duplicate and false accounts among our MAUs on an annual basis. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.
QI 2018	In the fourth quarter of 2017, we estimate that duplicate accounts may have represented approximately 10% of our worldwide MAUs. We believe the percentage of duplicate accounts is meaningfully higher in developing markets such as India, Indonesia, and the Philippines, as compared to more developed markets. In the fourth quarter of 2017, we estimate that false accounts may have represented approximately 3-4% of our worldwide MAUs. Our estimation of false accounts can vary as a result of episodic spikes in the creation of such accounts, which we have seen originate more fre- quently in specific countries such as Indonesia, Turkey, and Vietnam. From time to time, we may make product changes or take other actions to reduce the number of duplicate or false accounts among our users, which may also reduce our DAU and MAU estimates in a particular period
	<u>We regularly review our processes for calculating these metrics</u> , and from time to time we may discover inaccuracies in our metrics or make adjust- ments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccuracies or adjustments are immaterial unless otherwise stated. We intend to disclose our estimates of the number of duplicate and false accounts among our MAUs on an annual basis. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.
Q2 2018	In the fourth quarter of 2017, we estimate that <u>duplicate accounts may have represented approximately 10% of our worldwide MAUs</u> . We believe the percentage of duplicate accounts is meaningfully higher in developing markets such as India, Indonesia, and the Philippines, as compared to more developed markets. In the fourth quarter of 2017, we estimate that <u>false accounts may have represented approximately 3-4% of our worldwide MAUs</u> . Our estimation of false accounts can vary as a result of episodic spikes in the creation of such accounts, which we have seen originate more frequently in specific countries such as Indonesia, Turkey, and Vietnam. From time to time, we may make product changes or take other actions to reduce the number of duplicate or false accounts among our users, which may also reduce our DAU and MAU estimates in a particular period
	We regularly review our processes for calculating these metrics, and from time to time we may discover inaccuracies in our metrics or make adjust- ments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccuracies or adjustments are immaterial unless otherwise stated. We intend to disclose our estimates of the number of duplicate and false accounts among our MAUs on an annual basis. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.

Period	Investor Slide Deck Disclaimer (Emphasis Added)
Q3 2018	In the fourth quarter of 2017, we estimate that <u>duplicate accounts may have represented approximately 10% of our worldwide MAUs</u> . We believe the percentage of duplicate accounts is meaningfully higher in developing markets such as India, Indonesia, and the Philippines, as compared to more developed markets. In the fourth quarter of 2017, we estimate that <u>false accounts may have represented approximately 3-4% of our worldwide MAUs</u> . Our estimation of false accounts can vary as a result of episodic spikes in the creation of such accounts, which we have seen originate more frequently in specific countries such as Indonesia, Turkey, and Vietnam. From time to time, we may make product changes or take other actions to reduce the number of duplicate or false accounts among our users, which may also reduce our DAU and MAU estimates in a particular period
_	We regularly review our processes for calculating these metrics, and from time to time we may discover inaccuracies in our metrics or make adjust- ments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccuracies or adjustments are immaterial unless otherwise stated. We intend to disclose our estimates of the number of duplicate and false accounts among our MAUs on an annual basis. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.
Q4 2018	Not Yet Released

Figure 1: Facebook, Inc. Transparency Portal Charts



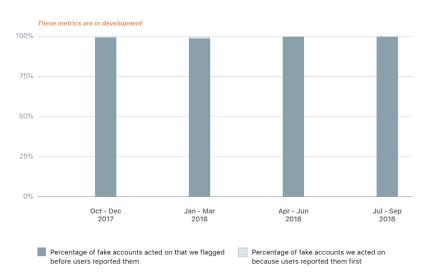
2 How many fake accounts did we take action on?

What we measure

We measure how many Facebook accounts we took action on because we determined they were fake.

This number reflects fake accounts that get created and then are disabled. It doesn't include attempts to create fake accounts that we blocked.

The statistics on the Facebook transparency portal at https://transparency.facebook.com/community-standards-enforcement#fake-accounts do not match the company's investor disclosures in its quarterly slide decks, and suggest a considerably more serious problem.



③ How many fake accounts did we find before users reported them?

What we measure

This metric shows the percentage of accounts we took action on that we found and flagged before users reported them.

This percentage is calculated as: the number of fake accounts acted on that we found and flagged before users reported them, divided by the total number of fake accounts we acted on.

This number reflects fake accounts that get created and then are disabled or acted on. It doesn't include attempts to create fake accounts that we blocked.

As of Q3 2018, Facebook was giving itself a near-perfect score for finding fake accounts before they were reported. In May 1989 East Germany, according to Der Spiegel, "Fully 98.85 percent had voted to approve the SED list..." The Berlin Wall fell six months later, ending the country's existence. Facebook found precisely zero of the fake accounts created by The New York Times before they were reported.

Period	MAU (in millions)	Upper Range Slide Deck %	Portal % if Part of MAU	Portal % if Apart from MAU	
2016	I,860 (Q4)	7.0%	Undisclosed	Undisclosed	
QI 2017	1,936	Undisclosed	Undisclosed	Undisclosed	
Q2 2017	2,006	Undisclosed	Undisclosed	Undisclosed	
Q3 2017	2,072	13.0%	Undisclosed	Undisclosed	
Q4 2017	2,129	14.0%	694 ÷ 2,129 = 32.6%	694 ÷ (2,129 + 694) = 24.6%	
QI 2018	2,196	Undisclosed	583 ÷ 2,196 = 26.5%	583 ÷ (2,196 + 583) = 21.0%	
Q2 2018	2,234	Undisclosed	800 ÷ 2,234 = 35.8%	800 ÷ (2,234 + 800) = 26.4%	
Q3 2018	2,271	Undisclosed	764 ÷ 2,271 = 33.2%	764 ÷ (2,271 + 764) = 25.2%	
Q4 2018	Not Yet Released				

Table 2: Aggregated Facebo	ok, Inc.	Fake A	Account Disclosur	es
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clude that Facebook claims up to 14% of MAUs were fake in Q4 2017.

With 2.271 billion reported MAUs as of Q3 2018, each percentage point in the disclosures above would represent 22.71 million accounts. Yet additional data from Facebook itself confusingly appears to contradict the figures from its investor slide decks. The company's transparency portal provides information on a variety of metrics, including "Fake Accounts" (a slightly different term than either of the terms used in its investor disclosures). Though it does not present percentages explicitly on the transparency portal, basic arithmetic indicates that Facebook took action on accounts representing 32.6% of MAUs in Q4 2017, 26.5% of MAUs in Q1 2018, 35.8% of MAUs in Q2 2018, and 33.2% of MAUs in Q3 2018.

While it is possible that the numbers in the graphs labeled (2) and (3) on the transparency portal are apart from MAUs, Facebook makes two disclaimers to the contrary.

First, it begins its discussion of fake accounts in part ① on the portal site by stating, "We estimate that fake accounts represented approximately 3% to 4% of monthly active users (MAU) on Facebook during Q2 2018 and Q3 2018." These are the same figures, presented in terms of MAUs, from the investor slide deck. But the graph immediately below in part ② shows completely different numbers: effectively 35.8% and 33.2%. It is also possible that these are fake accounts that Facebook "[took] action on" before the accounts became "active." Yet the graph contains a disclaimer that the graph "doesn't include attempts to create fake accounts that we blocked," meaning that the accounts had to be active first. Furthermore, according to the definition of MAUs put forward by Facebook in 2015, these accounts would appear to qualify.¹⁰²

The graph in part ③ appears to claim that Facebook is doing a near-perfect job every quarter finding fake accounts before they are reported, which is patently absurd. All we really know is that Facebook is doing a near-perfect job of finding the fake accounts it found, and that Facebook wants to project the image that it has a near-

¹⁰² AdWeek, November 6, 2015, "Facebook Changes Definition of Monthly Active Users." https://www.adweek.com/digital/monthly-active-users-definition-revised/

perfect track record at something.

That "something" might be securities fraud, and Facebook is aware that its disclosures are problematic. While halting the quarterly disclosure of the slide deck metrics <u>completely</u> after Q4 2017—a waving red flag—its lawyers inserted the following disclaimer into its Q3 2018 SEC Form 10-Q: "The estimates of duplicate and false accounts are based on an internal review of a limited sample of accounts, and we apply significant judgment in making this determination."¹⁰³ In other words, the company is not even looking at its entire database of users for the purposes of disclosing fake accounts and it won't say how "limited" its sample size is. Better yet, the phrase "we apply significant judgment" is legalese for "we are probably lying." In addition, both graphs on the portal have an orange disclaimer stating, "These metrics are in development"—meaning that a lawyer reviewed the material and there too found its presentation problematic.

To call these disclosures confusing is a gross understatement. We can at least conclude that in recent quarters, Facebook believes that of its MAUs, somewhere from



New York Times reporter Jack Nicas had no trouble creating obvious fake accounts. Source: The New York Times about 13% minimum to about 36% maximum are fake. Yet even with its near-perfect self-evaluated performance at removing fake accounts, fake accounts are still rampant on the site with real consequences.

We know for certain that Facebook does an atrocious job of reporting metrics and catching fake accounts, especially when they originate from inside the United States. In 2017 alone, it revised various metrics no fewer than ten times.¹⁰⁴ In the words of Jack Nicas, a journalist for *The New York Times* researching the fake accounts issue,

"On the fifth account, Facebook blocked me from using my name. I thought the jig was up. Then I added a middle initial, and the profile was approved. Later, I deleted the middle initial. After I had created eight fake accounts, Facebook began requiring a phone number. So I waited a few days and then created three more."

The accounts were removed once Nicas formally reported them.¹⁰⁵ But the process doesn't always work.

Individuals who inadvertently create duplicate accounts, perhaps after forgetting a password, can sometimes find that they are stuck with them. A relative of the author has four accounts on Facebook,

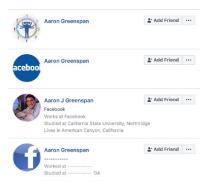
¹⁰³ SEC Form 10-Q, September 30, 2018, Page 4.

https://www.sec.gov/Archives/edgar/data/1326801/000132680118000067/fb-09302018x10q.htm

¹⁰⁴ Digiday, May 17, 2017, "Which Facebook metrics flub are you? Ad buyers rate Facebook's 10 measurement errors." https://digiday.com/marketing/facebook-measurement-errors/

¹⁰⁵ The New York Times, July 7, 2018, "Oprah, Is That You? On Social Media, the Answer Is Often No."

https://www.nytimes.com/2018/07/07/technology/facebook-instagram-twitter-celebrity-impostors.html



and used to have five. Three are tied to unknown authentication credentials, and may in fact be associated with landline telephone numbers, which Facebook allows during its sign up process. Those numbers cannot receive SMS text messages, however, and without an e-mail address on the account or SMS confirmation, there is no way to reset the password.¹⁰⁶ Facebook therefore has a feature allowing users to report their own duplicate accounts, but after months, it can remain the case that no action is taken.^{107,108}

Fake accounts in the author's name created over 10 years ago by persons unknown.

The fact of the matter is that Facebook does not now *and will not* ever have an accurate way to measure its fake account problem.



A fake social media account creation program called Jarvee promises users "rapid growth," Facebook's bread and butter.

Accurately assessing whether an account is fake or not is frequently something that a human cannot do with a high degree of certainty, let alone a computer. For this reason, Facebook has put itself in a situation where it is failing a type of Turing Test of its own creation, and which its business depends upon, tens of thousands of times per day—and for which there is no solution. Meanwhile, the problem gets worse. Those hoping to abuse Facebook have a plethora of tools at their disposal: endless cheap labor, plentiful SIM cards, proxy servers, and even software such as "Jarvee," one of dozens of programs that can create realistic fake social media accounts in an automated manner. Jarvee's web-

site claims that it can help, "Grow your business with real Facebook followers," whose fake posts can be scheduled in advance, linked to hashtags, assigned to join Facebook Groups, and more.

Taking all of these factors into account, we estimate that 50% or more of Facebook's current MAUs are actually fake. Facebook has already disclosed that since Q4 2017, as a conservative estimate, it has deleted 2.841 billion fake accounts on a network purporting to have 2.271 billion current MAUs, amounting to 55% of all accounts ever created. Whether or not our estimate (only 14.2% higher than what appears to be Facebook's transparency portal disclosure for Q2 2018) is precisely correct, the proportion of fake accounts will, without question, increase over time,¹⁰⁹ competing for the attention of fewer and fewer actual users. Artificial intelligence cannot solve

https://www.nbcnews.com/business/consumer/fake-facebook-profiles-cause-heartbreak-families-colleagues-n895091
 Malik, Om, February 16, 2018, "Facebook's Fake Account Problem Is Getting Bigger."
 https://om.co/2018/02/16/facebooks-fake-account-problem-is-getting-bigger/



¹⁰⁶ In 2011, a Facebook employee wrote of the lenient sign up process responsible for countless fake accounts, "some of you have noticed that we don't always require a phone verification for an account. This is a security feature designed to prevent spam and fake accounts that is only triggered when certain conditions aren't met." See https://news.ycombinator.com/item?id=3148995.

¹⁰⁷ The Chicago Tribune, May 4, 2018, "Facebook crackdown on fake accounts isn't solving the problem for everyone." https://www.chicagotribune.com/news/nationworld/ct-facebook-fake-accounts-20180504-story.html

¹⁰⁸ NBC News, July 26, 2018, "Fake Facebook profiles cause heartbreak for families and colleagues."

this problem; at this stage it is simply far too late to put the genie back into the bottle.

After all, Facebook's policies since 2005 have encouraged the unchecked proliferation of content and user accounts, euphemistically described as "sharing," and the entirely predictable result has been the creation of the world's largest digital toxic waste dump. It should not come as a surprise that the company no longer wants to disclose what it has found in its database—or that it may not want to look at all. Instead, Facebook's leadership is more desperate than ever to show growth at precisely the time when it should be focused on shrinking the company's footprint. Yet if Mark Zuckerberg were to finally make network quality too high of a priority, the implications would be enormous. Just askTwitter, which implemented a "purge" of fake accounts in early July 2018, leading to headlines such as, "Twitter is purging millions of fake accounts — and investors are spooked."¹¹⁰

Cambridge Analytica

On March 17, 2018, a whistleblower named Christopher Wylie came forward in *The Observer of London* (published on-line in conjunction with its sister newspaper



Christopher Wylie. Source: Tolga Akmen/AFP/Getty

The Guardian) with information on a small company called Cambridge Analytica Ltd., a data-driven consulting firm in the United Kingdom with ties to Cambridge University.¹¹¹ Although the media spun the story as a "data breach," in fact, the data came from a Russian-born Cambridge professor named Aleksandr Kogan who created a Facebook application in 2014 called "This Is Your Digital Life." The app was unremarkable in the broader context of Facebook applications at the time.

Media reports, including a segment on 60 Minutes, focused

on the fact that Kogan violated Facebook's terms of service for the Facebook Platform, handing over the Facebook data he had collected to a third-party for-profit corporation in exchange for money.¹¹² Kogan pointed out that Facebook had failed to enforce its own rules.

The data mattered insofar as Cambridge Analytica could use it for the 2016 presidential election in the United States, where the company was closely aligned with key backers of then-candidate Donald Trump, including Bob and Rebekah Mercer (investors) and Steve Bannon (the company's former vice president). Specifically, what Cambridge Analytica wanted "was access to [users'] friends, tens of millions

¹¹⁰ NBC News, July 9, 2018, "Twitter is purging millions of fake accounts — and investors are spooked."

https://www.nbcnews.com/tech/tech-news/twitter-purging-millions-fake-accounts-investors-are-spooked-n889941 111 The Guardian, March 17, 2018, "Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach." https://www.th.guy.com/cambridge.com/camb

https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election 60 Minutes, September 2, 2018, "Aleksandr Kogan: The link between Cambridge Analytica and Facebook."

https://www.cbsnews.com/news/aleksandr-kogan-the-link-between-cambridge-analytica-and-facebook-60-minutes/

of people [Kogan] could not otherwise reach easily." In short, Cambridge Analytica exploited the incredibly lax policies of the Facebook Platform—protected only by a flimsy terms of service contract—in order to access data on friends of friends.

This is precisely the same issue that the author of this report warned Mark Zuckerberg about in writing in April 2005, even going so far as to point out the potential legal and FTC liability, which Zuckerberg immediately dismissed. Almost thirteen years later, this issue became a turning point in the press's treatment of Facebook, as it appeared that the company bore at least some responsibility for the controversial 2016 election of Donald Trump. There is no question that it is the same issue; Sheryl Sandberg even appeared on Bloomberg Television¹¹³ stating,

"We were really focused on building social experiences and a lot of good happened because of those. And when we found problems, we would shut down that problem. So the specific case of the friends of friends sharing that happened with Cambridge Analytica, that specific case was shut down in 2015."

She did not mention that Mark Zuckerberg had been aware of the issue, the potential for abuse, and the potential liability associated with ignoring it, since 2005.

A number of questions remain concerning Cambridge Analytica's relationship with various Russian entities such as PJSC Lukoil.¹¹⁴



An exercise in self-parody: cartoon Mark Zuckerberg enjoying his virtual presence hovering above hurricane-ravaged Puerto Rico with a cartoon co-worker. Source: The Verge/Facebook, Inc.

Genocides and Natural Disasters

In 2017, Hurricane Maria devastated the island of Puerto Rico, providing an opportunity for Facebook to deploy its crisis response features.¹¹⁵ But the company went a step further.

Facebook capitalized on the situation in Puerto Rico, using it as a literal backdrop to highlight the company's investment in virtual reality. In one of the most tone-deaf corporate displays in history, a cartoon Mark Zuckerberg appeared alongside another cartoon representation of a female employee wearing cartoon aviator sunglasses to gawk

at the "realistic" destruction surrounding them in a 360° panorama.¹¹⁶ For the pur-

¹¹³ Bloomberg News, April 5, 2018, "Sheryl Sandberg Says Facebook Needs to Do Better Protecting Data." https://www.bloomberg.com/news/videos/2018-04-05/sheryl-sandberg-says-facebook-needs-to-do-better-protecting-data-video

¹¹⁴ The Guardian, March 17, 2018, "Cambridge Analytica: links to Moscow oil firm and St Petersburg university."

https://www.theguardian.com/news/2018/mar/17/cambridge-academic-trawling-facebook-had-links-to-russian-university 115 Facebook, Inc., "Crisis Response." https://www.facebook.com/about/crisisresponse/

¹¹⁶ The Verge, October 9, 2017, "A cartoon Mark Zuckerberg toured hurricane-struck Puerto Rico in virtual reality." https://www.theverge.com/2017/10/9/16450346/zuckerberg-facebook-spaces-puerto-rico-virtual-reality-hurricane

poses of this horrific demo, the avatars of each Facebook executive gave each other a high five.

Even more worrying, the Rohingya genocide in Myanmar has also been a pressing issue for Facebook, and one the company has done little if anything to address. The most obvious question is why Facebook has any presence in Myanmar in the first place—a country with a GDP under \$70 billion, or less than Mark Zuckerberg's personal net worth on some days, from which it derives barely any profit. With the United Nations describing Facebook as a "useful instrument for those seeking to spread hate," Facebook should have shut down its site in the country long ago. Yet executives continue to pledge that they will solve the problem of facilitating needless death by hiring a few more native speakers to police the platform.¹¹⁷ In short, just as Andrew Bosworth advocated in his memo, Mark Zuckerberg is determined to make the world more open and connected, even if it kills scores of people.

Advertisers Abandoning Facebook

Over the years, major advertisers have sporadically announced that they would stop advertising on Facebook due to poor performance. This was once unthinkable, as the promise of targeted advertising was supposed to change marketing forever. In the

uglymugagency · a month ago Having had my share of experiences with advertising on Facebook,I can wholeheartedly agree: Facebook is a downward spiraling mixed bag as a useful advertising venue. Between the declining US user base, it's credibility issues and it's obvious ad fraud, I can't in good conscience suggest clients pour that much money into the advertising there. $4 \circ 1 \times 5$ Beply · Share ·

A reader comment on the November 19, 2018 article "Facebook Advertisers Should Leave the Platform, Agencies Say" in Target Marketing Magazine. words of Mark Zuckerberg addressing Madison Avenue in 2007, "The next 100 years are going to be different for advertisers starting today. For the last 100 years media has been pushed out to people, but now marketers are going to be a part of the conversation."¹¹⁸

That was a conversation that General Motors¹¹⁹ and Proctor and Gamble¹²⁰ decided to have elsewhere, at least for a time. In 2012 and 2017 respectively, both companies announced that Face-

book ads were not working for them. Many small businesses with similar sentiments, but no market power, have little recourse but to pay their Facebook advertising bills and hope that they can achieve better results by tweaking their campaign configurations. But some have decided to abandon Facebook entirely, only to find that nothing changed at all. According to one business, "In the 60-day aftermath of the experiment, our shutdown of Facebook advertising had absolutely no immediate negative effect

¹¹⁷ BuzzFeed News, August 27, 2018, "How Facebook Failed The Rohingya In Myanmar."

https://www.buzzfeednews.com/article/meghara/facebook-myanmar-rohingya-genocide

https://www.ft.com/content/01341240-8cbd-11dc-b887-0000779fd2ac

¹¹⁹ Forbes, May 15, 2012, "GM Says Facebook Ads Don't Work, Pulls \$10 Million Account." https://www.forbes.com/sites/joannmuller/2012/05/15/gm-says-facebook-ads-dont-work-pulls-10-million-account/

¹²⁰ The Wall Street Journal, July 27, 2017, "P&G Cuts More Than \$100 Million in 'Largely Ineffective' Digital Ads'' https://www.wsj.com/articles/p-g-cuts-more-than-100-million-in-largely-ineffective-digital-ads-1501191104

on sales."¹²¹

Part of the reason that Facebook advertising has not been working for some advertisers is that the metrics being used to monitor them—especially video ads—are themselves fake. On October 26, 2018, the Fourth Amended Class Action Complaint was unsealed in *Tyler Barnett PR, LLC et al v. Facebook Inc.*¹²² The document, representing the plaintiffs' fourth attempt to clarify its allegations, had been updated to reflect documents obtained during discovery earlier in the lawsuit. Those documents contained some damning revelations. According to the updated complaint:¹²³

"Facebook's action rises to the level of fraud and may warrant punitive damages. Facebook did not discover its mistake one month before its public announcement. Facebook engineers knew for over a year, and multiple advertisers had reported aberrant results caused by the miscalculation (such as 100% average watch times for their video ads). Yet Facebook did nothing to stop its dissemination of false metrics."

"In addition to Facebook knowing about the problem far longer than previously acknowledged, Facebook's records also show that the impact of its miscalculation was much more severe than reported. The average viewership metrics were not inflated by only 60%-80%; they were inflated by some 150 to 900%."

"To the extent anyone at Facebook did not fully realize how it was calculating average viewership from the beginning (as Facebook's engineers did), it was only because of Facebook's longstanding reckless indifference to the metrics' accuracy. The wide disparity between the actual average viewership and Facebook's reported metrics should have been corrected immediately. But Facebook severely understaffed the engineering team in charge of fixing errors—employing only as few as two engineers—and this led to long delays before errors were fully investigated and corrected."

This lawsuit demonstrates, among other historical issues, that Facebook already has an alarming track record when it comes to providing accurate information to those who depend on it. Perhaps that is why advertisers spending tens of thousands, hundreds of thousands or millions of dollars on Facebook ads have found that they ended up with a return of zero on their respective investments.¹²⁴

¹²¹ Nutshell Blog, 2018, "I cut our Facebook spend from \$20,000 to zero and nothing tragic happened." https://www.nutshell.com/blog/facebook-spend-experiment/

¹²² Tyler Barnett PR, LLC et al v. Facebook Inc., California Northern District Court, Case No. 4:16-cv-06232-JSW. https://www.plainsite.org/dockets/32ospkjfz/california-northern-district-court/tyler-barnett-pr-llc-v-facebook-inc/

¹²³ Tyler Barnett PR, LLC et al v. Facebook Inc., California Northern District Court, Case No. 4:16-cv-06232-JSW, Document 165. https://www.plainsite.org/dockets/download.html?id=257078768&z=f6e3c72d

¹²⁴ AdEspresso, September 16, 2015, "What you should learn from the man who lost \$600,000 on Facebook ads." https://adespresso.com/blog/what-you-should-learn-from-the-man-who-lost-600000-on-facebook-ads/

Tanking Employee Morale

Facebook was long thought of as a "cool" place to work by graduating computer science students. No longer. The spate of negative press has made aspiring software engineers re-think whether they want to be associated with a company so many suddenly revile.¹²⁵ Employees already working at the company's Menlo Park headquarters are questioning their life choices.¹²⁶ According to CNBC, "Several former employees likened the culture to a 'cult'" where "employees are discouraged from voicing dissent—in direct contradiction to one of Sandberg's mantras, 'authentic self."¹²⁷

Without fresh talent and new ideas, Facebook risks falling into a vortex of mediocrity, in which tired executives and their workers long for days gone by when anything the company did was greeted with cheers and enthusiasm. Based on the steady steam of security vulnerabilities that Facebook has had to grapple with, one could argue that its programming talent has already been mediocre—or perhaps talented but over-confident—for some time, making the prospect of anything worse truly frightening.

An interesting side-effect of the low morale that has suddenly plagued Facebook employees is a newfound willingness to leak information to the media. On December 5, 2018, *BuzzFeed* ran the headline, "Mark Zuckerberg's Biggest Problem: Internal Tensions At Facebook Are Boiling Over."¹²⁸

"Another former senior employee noted a growing sense of paranoia among current employees. "Now, people now have burner phones to talk shit about the company not even to reporters, just to other employees," they told BuzzFeed News."

With a growing amount of internal correspondence making its way outside of the company, a cycle of scandal has been set in motion, anchored by years of deeply embarrassing e-mail, that will be difficult for the executive team to escape.

Growing Media Unease

Starting after the Cambridge Analytica scandal, there was a growing unease in newsrooms nationwide that perhaps Facebook had been the recipient of kid glove treatment for too long. On October 29, 2018, the first segment of a two-part documentary called "The Facebook Dilemma" aired on PBS's flagship investigative show,

¹²⁵ The New York Times, November 15, 2018, "1 Don't Really Want to Work for Facebook.' So Say Some Computer Science Students." https://www.nytimes.com/2018/11/15/technology/jobs-facebook-computer-science-students.html

¹²⁶ CNBC, January 8, 2018, "Inside Facebook's 'cult-like' workplace, where dissent is discouraged and employees pretend to be happy all the time." https://www.cnbc.com/2019/01/08/facebook-culture-cult-performance-review-process-blamed.html

¹²⁷ Also cult-like: the hidden, over-the-top insignia on the inside of Mark Zuckerberg's hooded sweatshirt, revealed after an on-stage panic attack instigated by Kara Swisher asking questions about privacy that were more skeptical than usual. See https://www.wsj.com/video/d8-facebook-ceo-mark-zuckerberg-full-length-video/29CCI557-56A9-4484-90B4-539E282F6F9A.html at 16:12.

¹²⁸ BuzzFeed News, December 5, 2018, "Mark Zuckerberg's Biggest Problem: Internal Tensions At Facebook Are Boiling Over." https://www.buzzfeednews.com/article/charliewarzel/facebooks-tensions-zuckerberg-sandberg

Frontline.¹²⁹

By the time a *NewYorkTimes* exposé two weeks later demonstrated that Sheryl Sandberg had authorized a retaliatory investigation into George Soros's possible financial interest in shorting FB stock¹³⁰—an issue she fumbled and lied about afterward when confronted¹³¹—that unease had turned to disgust. The company pointed the finger at one of its public relations firms, Definers, which it promptly fired. Sheryl Sandberg thus far has kept her job.

"'No Morals': Advertisers React to Facebook Report" read the follow-up *Times* headline on November 15, 2018.¹³² It was a stark about-face from the *Times*'s usual, relatively lax coverage of Facebook's missteps. Even as early as three months prior, newly minted editorial board member Kara Swisher penned a confused op-ed entitled "The Expensive Education of Mark Zuckerberg and Silicon Valley," in which Swisher recounted mostly her own feelings about Facebook's CEO, which early on were about as cavalier as Zuckerberg himself. Her deepest, most insightful criticism at the time, derived from her own personal impressions (as opposed to court documents): that Mark was young. She dubbed him the "toddler CEO."

Naturally, *60 Minutes* producer Shachar Bar-On couldn't resist doing a follow-up segment in 2010 when the toddler CEO was all grown up. This was only marginally less nauseating than Lesley Stahl's initial fawning interview with Zuckerberg in 2007, which he also produced. In the words of *New York Magazine*, "By most accounts, her interview was a public-relations coup. PaidContent said 'Zuckerberg essentially reduced the venerable newsmagazine to an unwitting shill' for the site's 'utterly meaningless' redesign."¹³³ (A few years later, the same publication also pointed out the peril of Swisher's style of access journalism, in which "she's managed to elevate herself into Silicon Valley royalty by writing about Silicon Valley royalty, often acerbically."¹³⁴)

Similar examples of glib media puffery from 2006-2015 are too numerous to count. So are the cases where critics of Zuckerberg and Facebook were ignored, silenced, insulted,¹³⁵ publicly ridiculed, impersonated, blocked, sued, and even stalked. At the very least, reporters and those reading their coverage referred to the author of

¹²⁹ Frontline, October 29-30, 2018, "The Facebook Dilemma." https://www.pbs.org/wgbh/frontline/film/facebook-dilemma/

¹³⁰ The New York Times, November 14, 2018, "Delay, Deny and Deflect: How Facebook's Leaders Fought Through Crisis." https://www.nytimes.com/2018/11/14/technology/facebook-data-russia-election-racism.html

¹³¹ The New York Times, November 29, 2018, "Sheryl Sandberg Asked for Soros Research, Facebook Acknowledges." https://www.nytimes.com/2018/11/29/technology/george-soros-facebook-sheryl-sandberg.html

¹³² The New York Times, November 15, 2018,"'No Morals': Advertisers React to Facebook Report." https://www.nytimes.com/2018/11/15/business/media/facebook-advertisers.html

¹³³ New York Magazine, December 6, 2010, "Mark Zuckerberg on 60 Minutes: The 'Toddler CEO' Is All Grown Up." http://nymag.com/intelligencer/2010/12/mark_zuckerberg_on_60_minutes.html

¹³⁴ New York Magazine, July 15, 2014, "Kara Swisher Is Silicon Valley's Most Feared and Well-Liked Journalist. How Does That Work?" http://nymag.com/intelligencer/2014/07/kara-swisher-silicon-valleys-most-powerful-snoop.html

¹³⁵ When discussing Facebook in 2013, Harvard Business School associate professor Ben Edelman, a respected analyst of fraudulent advertising practices, was interrupted and rudely lectured by a news anchor who concluded that, "I don't know that you made the sale." See Fox Business News, October 23, 2013, "Poorly targeted Facebook ads a downfall?" https://video.foxbusiness.com/v/2764151578001/?#sp=show-clips

forensic on Oct 28, 2011 [-] People insulting Business > writing a book like that is honestly going to make large numbers of peo
feel like you're the next Unabomber, just another overeducated Aspere intological and legitimate a Aaron, as a prec
Facebook's Fools: 15 Who Missed Out
a Self-proclaimed to the authoritie: If this intolerable unfairness he must demonstrate how the authoritie: I really have no idea what you're talking about.
I have a lot You are blocked from following @karaswisher ate modern day would Aaron psychiatric medications. Beception or committed a lie of omis
He had pienty o Nothing. Zuck g fair!! And it's all Aaron - society is not to blame for rewarding cheaters. Your parents are to blame for giving you a crippling r

Pointed, informed criticism of Facebook and Mark Zuckerberg led to a variety of reactions from the company's fans, many of them journalists and software professionals.

this report as a "parasite," one of "Facebook's Fools," "Harvard bitch," "vain," "laughable," and "bitter." Armchair diagnoses of unspecified mental illness were also proffered. In 2012, one journalist wrote, "Right now, it might be best for him to ask himself why no one is agreeing with him or jumping to his aid on the Facebook issue and consider that it might be time to move on."¹³⁶

But no one else, least of all the press, wanted to move on. Finally,

the glue is starting to come unstuck as overwhelming evidence of wrongdoing mounts.

Psychological Effects

Excessive on-line social networking can be fundamentally unhealthy. Numerous studies have concluded that using Facebook, Inc.'s product specifically makes participants less happy about their lives, not more.^{137,138} This is hardly a surprise, as the News Feed pressures users to share only the most positive and impressive aspects of their lives in the most flattering light possible. The cycle of forced sharing never ends thanks to constant notifications and real-world expectations of replies. This social pressure can be especially difficult for children to handle as they navigate school.

What users may not realize is that "[a]fter thinking about platform business model for a long time," Mark Zuckerberg referred to this detrimental pressure in a November 19, 2012 e-mail to Sheryl Sandberg and Sam Lessin (among others) as the need to "unlock much more sharing in the world," as though sharing were a prize in a video game with meaningless characters. More sharing, he wrote, was "good for the world, but it's not good for us unless people also share back to Facebook and that content increases the value of our network." Even if meaningless posturing or middle school bullying—both types of frequent sharing—increases Facebook, Inc.'s market value through additional advertising opportunities, it would seem obvious to most that sharing is not a universal good.

¹³⁶ TechCrunch, September 20, 2012, "Tell It To The Judge: Why The Press Is Wary When Another Scorned Harvard Alum Says Zuck Copied Him."

https://techcrunch.com/2012/09/19/tell-it-to-the-judge-why-the-press-is-wary-when-another-scorned-harvard-alum-says-zuck-copied-him/ 137 Park, Namsu et al, CyberPsychology & Behavior, Volume 12, Number 6, 2009, "Being Immersed in Social Networking Environment: Facebook Groups. Uses and Gratifications. and Social Outcomes."

https://repositorio.uc.cl/bitstream/handle/11534/19211/Being%20immersed%20in%20social%20networking%20environment%20Facebook%20Groups,%20uses%20and%20gratifications%20and%20social%20outcomes.pdf

¹³⁸ Shakya, Holly B. et al, American Journal of Epidemiology, Volume 185, Issue 3, February 1, 2017, "Association of Facebook Use With Compromised Well-Being: A Longitudinal Study." https://academic.oup.com/aje/article/185/3/203/2915143

E is for Ecosystem and F is for Fraud

The combination of Facebook's ubiquity and its openness has made the company the perfect playground for criminals and fraudsters of all stripes. Simultaneously, as Facebook becomes larger and larger with effectively no barriers to sign up, it assumes more of the characteristics of the internet at large. One of those characteristics is the ability to act anonymously. Another is the ability to slip through what are sometimes ferociously large cracks in regulatory structures and law enforcement institutions.

Human Trafficking

According to a human trafficking investigator contacted by PlainSite, Facebook is the number one platform for human trafficking in the United States. In October 2018, a lawsuit filed by a Jane Doe plaintiff in Texas concerning the practice named the company as a defendant along with now-defunct backpage.com.¹³⁹ Facebook's response, that "Human trafficking is abhorrent and is not allowed," says nothing about any active plans at Facebook to combat, let alone prevent, its human trafficking problem.

Western Union, MoneyGram and Pre-Paid Cards

Much of the fraud that takes place on Facebook involves fake accounts that try to scam real users out of real money. The elderly and disabled are especially vulnerable to these types of scams, which take place in the digital equivalent of broad daylight using Facebook Messenger. Often, the perpetrator will pose as being in need of cash to survive, or in many cases, to travel to a meeting place for a promised romantic tryst with the victim. Unsurprisingly, these fake accounts target men and involve the use of photographs of attractive women.

In order to extract money from the victim, there are a number of standard options. Western Union, MoneyGram and Apple iTunes gift cards^{140,141} are popular money laundering vehicles as payments cannot be easily recalled once money has been transferred, and gift cards are especially difficult to trace. Problems with these payment methods have been so prevalent that both Western Union and MoneyGram have faced criminal action for their lack of diligence in preventing their payment networks from being abused.^{142,143}

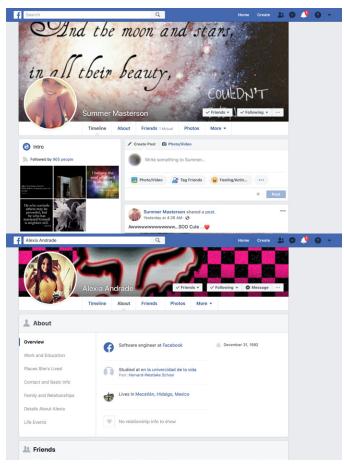
¹³⁹ Engadget, October 3, 2018, "Facebook sued for allegedly enabling human trafficking." https://www.engadget.com/2018/10/03/facebook-lawsuit-enabling-human-trafficking/

¹⁴⁰ ABC (Australia), January 31, 2018, "iTunes gift card scams emerge as rising threat to vulnerable consumers." https://www.abc.net.au/news/2018-02-01/itunes-gift-card-scams-emerge-as-rising-threat-to-consumers/9383454

¹⁴¹ Metro, July 12, 2018, "Why online scammers ask for an iTunes gift card." https://www.metro.us/news/the-big-stories/itunes-gift-card-scam

¹⁴² USA v. The Western Union Company, Pennsylvania Middle District Court, Case No. 1:17-cr-00011-CCC. https://www.plainsite.org/dockets/33z8pdxqh/pennsylvania-middle-district-court/usa-v-the-western-union-company/

¹⁴³ United States v. Moneygram International, Inc., Pennsylvania-Middle-district Court, Case No. 1:12-cr-00291-CCC. https://www.plainsite.org/dockets/rza719pk/pennsylvania-middle-district-court/united-states-v-moneygram-international-inc/



Top: A suspicious Facebook account featuring numerous hallmarks of fakery: A) an especially revealing (and likely Photoshopped) profile photograph of an attractive woman; B) a cheerful name; C) generic, upbeat posts containing no uniquely identifying information at all; D) account photographs containing generic text; and E) purported homes around the world. Source: Facebook Bottom: Another suspicious Facebook account, this one claiming to belong to a "Software engineer at Facebook." The user's school (misspelled in Spanish), "la univercidad de la vida" translates to "the university of life"—a colloquial way of indicating no college degree. While Mark Zuckerberg may have dropped out of Harvard, most of the company's software developers are college-educated and do not live in Mexico. Source: Facebook

Sextortion

With the advent of integrated laptop and smartphone cameras, it is trivially easy for scam artists to con people, almost always men, into voluntarily handing over video footage of sexual acts that can be used for blackmail. The victim of the scam does not realize that their partner on the other end of the internet is actually a thief until too late, and by that point a demand for money has usually already been made.¹⁴⁴ Since many of the perpetrators of these scams reside across international boundaries, it's nearly impossible for law enforcement to take corrective action.

The same script plays out time and time again, even though Facebook could easily take actions (such as inserting user interface warning flags into Facebook Messenger conversations based on keywords such as "Western Union") to prevent stories like this one:

"In one recent case, a 36-year-old West Australian man sent a video of himself in a 'compromising' position to a woman he thought he knew and recently befriended on Facebook. But that woman turned out to be a scam artist from overseas, who demanded \$5,000."¹⁴⁵

Facebook's Role in the 2016 Election

On February 16, 2018, Special Counsel Robert S. Mueller, III filed an indictment against a Russian organization called Агентство интернет-исследований, or Internet Research Agency.¹⁴⁶ Like many click farms, its operations took place in a nondescript building—except that the workers in this building, in Saint Petersburg, happened to

¹⁴⁴ The Daily Mail, February 5, 2016, "Carpenter, 62, tricked into exposing himself online by mystery blonde and then threatened with blackmail"

https://www.dailymail.co.uk/news/article-3433638/Carpenter-tricked-exposing-online-mystery-blonde-threatened-blackmail.html 145 ABC (Australia), March 19, 2018, "Warning 'sextortion' on the rise as models used in online blackmail scams."

https://www.abc.net.au/news/2018-03-20/sextortion-warning-as-models-used-in-online-blackmail-scams/9567202 146 USA v. INTERNET RESEARCH AGENCY LLC et al, District Of Columbia District Court, Case No. 1:18-cr-00032-DLF.

https://www.plainsite.org/dockets/39nohzsau/district-of-columbia-district-court/usa-v-internet-research-agency-llc-et-al/



A Facebook advertisement placed by the Russian intelligence-linked Internet Research Agency. Source: House Permanent Select Committee on Intelligence (2018 Minority)

be taking orders from Yevgeny Prigozhin, a man who once catered "birthday parties as well as dinners with visiting leaders" for Russian President Vladimir Putin.¹⁴⁷

Internet Research Agency workers were not explicitly told that they were working for the Russian government in an official capacity, but according to one former worker, it was obvious. The task: spending all day creating and deploying fake accounts on social media platforms, and especially Facebook.¹⁴⁸ The accounts were used to plant fake narratives, advertisements and images that could sow conflict amongst American voters, and in some cases, actually bring them out into the streets.

Two months after the indictment, Facebook proudly announced that it had removed "270 accounts and pages controlled by Russia's Internet Research Agency,"¹⁴⁹ as though it had achieved a victory in the battle against Russian propaganda. If anything, the num-

ber of accounts identified signaled a worrying defeat. The Internet Research Agency reportedly employed "over 1,000" workers, each drawing a "hard-to-match \$1,400 weekly paycheck."¹⁵⁰ With over 1,000 Russian employees creating hundreds—if not thousands—of fake accounts each day, likely with the aid of software similar to Jarvee, Facebook's total catch would amount to less than 0.3% of the Internet Research Agency's fake account totals for a *single day*, assuming each worker created just 100 accounts.

Rather than highlight the scale of the problem, *The New York Times* quoted Facebook's former Chief Security Officer Alex Stamos as saying, "uncovering this activity took months of work by our team." At such a pace, Facebook's team would take roughly 100 years or more to uncover a single day of estimated Internet Research Agency activity. In traditional Silicon Valley fashion, Stamos "failed upward" to a teaching fellowship at Stanford.¹⁵¹

In August 2018, Facebook announced that it had removed a still underwhelming 652 fake accounts used by Russian and Iranian intelligence.¹⁵²

¹⁴⁷ CNN, October 17, 2017, "Exclusive: Putin's 'chef,' the man behind the troll factory." https://www.cnn.com/2017/10/17/politics/russian-oligarch-putin-chef-troll-factory/index.html

¹⁴⁸ Wired, May 10, 2018, "House Democrats Release 3,500 Russia-Linked Facebook Ads."

https://www.wired.com/story/house-democrats-release-3500-russia-linked-facebook-ads/

¹⁴⁹ The New York Times, April 3, 2018, "Facebook Removes More Accounts Tied to Russian 'Troll Factory." https://www.nytimes.com/2018/04/03/business/facebook-russian-trolls-removed.html

¹⁵⁰ The New York Times, February 18, 2018, "Inside the Russian Troll Factory: Zombies and a Breakneck Pace." https://www.nytimes.com/2018/02/18/world/europe/russia-troll-factory.html

¹⁵¹ Stanford University. https://cisac.fsi.stanford.edu/people/alex-stamos-0

¹⁵² The Guardian, August 22, 2018, "Facebook removes 652 fake accounts and pages meant to influence world politics."

Market Saturation

In late 2018, the CEO of a long-forgotten bikini app, once popular on the Facebook Platform, decided to visit London on business. Acting on a tip from a journalist, the parliament of the United Kingdom—furious over Mark Zuckerberg's refusal to testify in person after the Cambridge Analytica scandal—seized confidential litigation documents from the bikini app CEO's computer revealing that as early as 2012, Facebook vice president Sam Lessin wrote to Mark Zuckerberg expressing concern that the

>>However, the problem is that most businesses (local, etc.) don't fit into >>the bucket where they can advertise on a 'brand' basis. (1) they aren't >>profitable enough to speak to many people imprecisely to just reach a few >>new customers (2) they don't have the expertise to generate the creative >>they need to get 'free distribution' multiplier (3) They can't measure >>well enough to know what to spendŠ. upshot, not everyone can be a brand >>advertiser, actually most people can'tŠ. There are also several problems >>with 'brand' advertisers being our 'non-commodity' business Š. (1) there >>are new ad networks / platforms / tools which chip away at the >>defensibility / non-commodityness of 'scale', (2) we are running out of >>humans (and have run-out of valuable humans from an advertiser >>perspective) (3) brand advertisers will get better, but they aren't that >>good at measuring their spend, so they have finite budgets. -- The >>upshot of which is that while being 'big' does provide us a return on >>scale currently, it isn't something which we are going to be able to more >>than 2X-4X in my mind anytime soon, and in some ways I think we will face >>increasing pressure on the value we derive from our distribution scale

Among other documents in a 250-page cache, an e-mail exchange between Sam Lessin and Mark Zuckerberg from October 26, 2012, filed under seal in a lawsuit in San Mateo County, was made public in an extraordinary act by the United Kingdom's Parliamentary Committee on Digital Culture, Media and Sport, which seized records from the plaintiff's CEO as he visited London on business. company was "running out of humans (and [] out of valuable humans from an advertiser perspective)." Presumably, this comment was informed by access to detailed information about Facebook user demographics, raising the question of who exactly was signing up for the site after 2012 if not actual human beings.

One place Zuckerberg has set his sights on as a potential panacea for Facebook's flagging engagement problem is China. He has made a public show of his interest in learning Chinese (which may or may not also be related to his marrying Priscilla Chan, with whom he attended college)¹⁵³, and his enthusiasm for jogging in Tiananmen Square on a day when air pollution was at hazardous levels would have made any Communist Party propaganda minister proud.¹⁵⁴ Yet despite all of these

efforts and Zuckerberg's enthusiastic willingness to ignore the Chinese government's substantial and terrifying human rights violations, Facebook has been unsuccessful at annexing one billion Chinese citizens into its so-called community.

The FAANG Delusion

After the spectacular implosion of the dot-com bubble in 2001, it would have sounded ridiculous for large financial networks to start herding investors into technology stocks in exactly the same way that they had less than twenty years prior. Instead, financial television anchors devised a new term for the same overvalued nonsense they had unsuccessfully peddled before: an acronym, FAANG.

FAANG stocks were all the rage on CNBC and Bloomberg for over three years, and they could seemingly only go in the up direction thanks to their limitless potential.

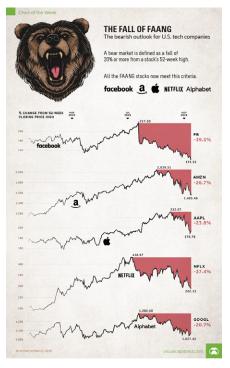
https://www.theguardian.com/technology/2018/aug/21/facebook-pages-accounts-removed-russia-iran

¹⁵³ Quartz, October 25, 2015, "Mark Zuckerberg's 20-minute speech in clumsy Mandarin is his latest attempt to woo China." https://qz.com/532834/mark-zuckerbergs-20-minute-speech-in-clumsy-mandarin-is-his-latest-attempt-to-woo-china/

¹⁵⁴ The New York Times, March 18, 2016, "With 'Smog Jog'Through Beijing, Zuckerberg Stirs Debate on Air Pollution." https://www.nytimes.com/2016/03/19/world/asia/mark-zuckerberg-jogging-beijing-smog.html

That FAANG stocks had absolutely nothing to do with fangs didn't matter. As long as it sounded like a word, any word, in the English language, that was enough to convince retail investors that they should hand over their money. And hand over their money they did. Before long, there were analysts recommending absurd variations of the FAANG trade. One headline from October 3, 2017 read, "It Should Be FAAANG, Not FANG: [Bank of America Merrill Lynch]."¹⁵⁵

"Savita Subramanian, a strategist at the Wall Street firm, believes that FANG, an acronym created by Jim Cramer to highlight the four most popular and best-performing technology companies, should be changed to FAAANG to accommodate the equally good growth prospects of Broadcom and Adobe."



A chart of the so-called FAANG trade's performance as of the close of trading on November 21, 2018. Source: visualcapitalist.com

A year later, MarketWatch implored investors to, "Forget Facebook and Apple and buy cheap

BANG stocks,"¹⁵⁶ which is every bit as stupid as it sounds.

Then, just as suddenly, the FAANG trade fell apart. By November 2018, CNBC, *Gizmodo* and *MarketWatch* were all frantically running stories about the imminent (and entirely predictable) demise of the FAANG trade.^{157,158,159} *MarketWatch* even noted that, "the tech titans themselves, so often the subject of hero worship (like Elon Musk of Tesla), are now facing tougher scrutiny, too." For the first time, this even applied to Mark Zuckerberg.

Impending Regulation and Fines

As Facebook's dominance over media, the internet, and average people's lives generally has grown steadily, government interest in regulating the company has remained fairly low, thanks in large part to a billionaire-friendly Republican-dominated Congress

156 MarketWatch, October 5, 2018, "Forget Facebook and Apple and buy cheap BANG stocks."

¹⁵⁵ Investopedia, October 3, 2017, "It Should Be FAAANG, Not FANG: BofAML." https://www.investopedia.com/news/it-should-be-faaang-not-fang-bofaml/

https://www.marketwatch.com/story/forget-facebook-and-apple-and-buy-cheap-bang-stocks-2018-10-05 157 CNBC, November 13, 2018, "The FAANG trade is 'dead': Money manager Peter Boockvar."

https://www.cnbc.com/2018/11/13/the-faang-trade-is-dead-says-top-money-manager-peter-boockvar.html 158 *Gizmodo*, November 20, 2018, "Why Some People Are Freaking Out About Tech Stocks Right Now."

https://gizmodo.com/why-some-people-are-freaking-out-about-tech-stocks-righ-1830560924 159 *MarketWatch*, November 21, 2018, "There's a darker message for investors in the FAANG selloff."

https://www.marketwatch.com/story/theres-a-darker-message-for-investors-in-the-faang-selloff-2018-11-20

and Facebook's intense lobbying efforts. With the Democratic Party taking control of the House of Representatives as of January 3, 2019, that calculus may finally change.

The Federal Trade Commission, largely regarded as inept due to political circumstances, has been reviewing its 2011 Consent Order¹⁶⁰ with Facebook ever since the Cambridge Analytica scandal broke in the spring of 2018. Since that time, numerous other scandals have come to light, some affecting tens of millions of accounts at a time. Theoretically, if enforced, fines from the Consent Order alone, excluding other litigation and settlements, could reach into the trillions of dollars.¹⁶¹

The Next "Cool" Thing

Mark Zuckerberg's fear of being displaced by the next cool thing is not unreasonable. His strategic purchases of Instagram, Oculus and WhatsApp have widely been hailed as positive for the company, even with price tags in the billions that would make most CEOs blush.



Bill Gates exclaiming the word "cool" in a February 1993 animated video called COOL.AVI, distributed with various OEM PCs as part of the Microsoft Multimedia Pack to demonstrate the early video playback features of Microsoft Windows. Gates was never quite able to get people to think of Windows as cool, so much as necessary. Today, many are starting to think of Facebook as neither. See https://www.youtube.com/watch?v=tll-AckwjNk.

It is unrealistic to think that Mark will always be able to buy enough insurance policies for Facebook to flourish forever, and certainly not to the same degree it did from 2004 though 2016. The best that investors can hope for is a comfortable existence for the company similar to Microsoft's after its best days of Windows domination were behind it.

Just as Bill Gates was blindsided by Netscape Navigator and the paradigm shift that the World Wide Web represented, so too will Mark Zuckerberg be blindsided by something. *The Crimson* may have been right after all to draw comparisons between Harvard dropouts Bill and Mark in Facebook's early days—but with one crucial difference. Whereas Bill and Microsoft focused on the core essentials of productive computing, Mark focused on what he considered "cool." Consequently, today, Facebook does not have an arsenal of different, highly-profitable products

at its core that keep the economy humming. In the words of Mark himself, ''Senator, we run ads.'' $^{\rm 162}$

¹⁶⁰ Federal Trade Commission, File No. 092 3184, "Agreement Containing Consent Order."

https://www.ftc.gov/sites/default/files/documents/cases/2011/11/11129facebookagree.pdf

¹⁶¹ The Washington Post, April 9, 2018, "How big could Facebook's fine theoretically get? Here's a hint: There are four commas, and counting." https://www.washingtonpost.com/news/the-switch/wp/2018/04/09/how-big-could-facebooks-fine-theoretically-get-heres-a-hint-there-are-four-commas-and-counting/

¹⁶² YouTube, April 10, 2018, "Senator Asks How Facebook Remains Free, Mark Zuckerberg Smirks: We Run Ads' | NBC News." https://www.youtube.com/watch?v=n2H8wx1aBiQ

If the ad platform turns out to be based on the largest swindle the world has ever seen, it won't take much for a newcomer to overtake Facebook.

Conclusion

In the words of Masha Gessen, "formal institutions are actually not designed to stand up to somebody who is dealing with them in bad faith."¹⁶³ The evidence in this report demonstrates beyond a reasonable doubt that Mark Zuckerberg is a bad faith actor.

Having arrived there via a path paved with lies, in April 2018, Zuckerberg told the United States Congress, "One of my greatest regrets in running the company is that we were slow identifying the Russian information operations in 2016." But Mark wasn't just slow in identifying the problem. He refused to believe that there was one, just as he refused to believe that the friends of friends problem underlying the Cambridge Analytica scandal was an issue as early as April 2005.

Mark has gone from being an "unethical" "jerk" (his own words) with barely the maturity level of a bratty teenager to national security threat who does not understand and literally cannot control his own creation. Nor does he understand the large and often unwieldy geopolitical forces that he and his company have such an impact on.

Today, having allowed the creation of billions of fake accounts, Facebook may be the largest centralized facilitator of fraud and government propaganda ever built. That alone is a problem demanding an immediate solution which, it goes without saying, is to start by making the site far smaller. As Mark once wryly said himself about houseSYSTEM, "the trick isn't adding stuff, it's taking away."

Unfortunately, since even before The Facebook was built, it has always been the case that nothing Mark says can be trusted, from the claim that he invented the site in his dorm room in Kirkland House as "a Mark Zuckerberg production" to the nominal "fact" that Facebook serves 2 billion active users, which its own flawed disclosures show it does not. Yet his role as the company's CEO appears to be fixed in place with the cement of stock ownership.

There are at present too many tragic messes with Facebook's obnoxious thumbprints all over them. The evidence suggests that these affairs were neither inevitable nor pre-ordained. Rather, they are the follow-on effects of one of the greatest sustained frauds the world has ever seen: an innocuous, secure student-run project hijacked and perverted by a pathologically ambitious student who used his uncanny ability to deceive to blow an unparalleled technology bubble whose riches literally attracted

¹⁶³ Democracy Now!, October 5, 2017. "Russian Journalist Masha Gessen on Trump and Putin's Autocracy and Media's Refusal to Call Out Lies."

https://truthout.org/video/russian-journalist-masha-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-journalist-masha-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-journalist-masha-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-journalist-masha-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-media-s-refusal-to-call-out-lies/wideo/russian-gessen-on-trump-and-putin-s-autocracy-and-putin-s-autocracy-autoc

everyone from American Presidents to the KGB's successor organizations, and seemingly every criminal and scam artist in between.

It all comes back to what this author told Mark on January 8, 2004, three days before Mark registered thefacebook.com:

ThinkComp: and there's the very real risk that it could blow up in both of our faces, which i'd rather avoid

ThinkComp: i guess that's basically how i feel zberg02: yea i don't think it's that controversial actually

Mark's idea was controversial, to the point of being radical, even if he didn't realize it at the time. Now, after allowing a radical naïf unchecked power for 15 years, enabled by technology and financial journalists, Hollywood, the most aggressive capitalists that the United States has on offer, lax regulators at the Federal Trade Commission, and even Harvard University, we are all paying the price in the form of damaged democratic governance.

Mark Zuckerberg does not deserve his billions. He deserves a jail sentence. He is unfit to lead a publicly traded corporation. Time and again he has shown that he cannot be trusted. His product, a growth-optimized variant of the original Facebook, is unsustainable and already collapsing under the weight of the unprecedented fraud it enables. Investors no longer have any excuse for supporting his enterprise.