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Meta: Case Study

Disclaimer: Research and analysis conducted independently by a Meta employee in the Business Integrity organization.

Background

Meta, formerly known as Facebook, is a public for-profit company in the Communications Sector industry.¹ The company was founded in 2004 by Mark Zuckerberg and several Harvard peers, and is headquartered in Menlo Park. The initial appeal of the company lay in the transparency it enforced regarding users' real identities, in contrast to its earlier competitors such as Myspace. To facilitate this, the founders also initially targeted specific colleges, which reinforced the sense of community.²

The transparency upon which the company gained its initial success may seem in contrast to its current reputation. The company has expanded astronomically but remains close to its founding product: its primary products continue to be social media and messaging platforms (Facebook, Instagram, WhatsApp, and Messenger), and its revenue is still heavily weighted toward digital advertising. The company is diversifying its portfolio, however, with a wider swath of e-commerce products (Instagram Shops, Facebook Shops, Facebook Marketplace, and so on) and consumer electronics (Oculus headsets and Ray-Ban Stories).³ In the third quarter of 2021, Meta reported that Monthly Active Users (MAU) were 2.91 billion, a 6% increase from the prior year. Revenue increased 35% year-over-year to \$29.0 billion, 97.5% of which came from ads revenue, culminating in an operating margin of 36%.⁴

Environmentally, software companies tend to have an inherently lower carbon footprint than physical product competitors. The main drivers of Meta's carbon footprint, specifically, are its data centers and employee operations. One study found that each Facebook user produces 12 grams of CO₂ by using its services throughout the year⁵; another report found that Meta emitted approximately 252,000 of CO₂ in 2019, down from approximately 616,000 in 2017.⁶ Meta furthered this progress by achieving carbon neutrality in 2020 through a 94% reduction in emissions, with offsets for the remaining emissions, and by powering operations entirely through renewable energy.⁷

Meta, though, has drawn public criticism for different elements of its corporate sustainability, their challenges with user content moderation and user-provided misinformation. The company has invested significantly in these as well: while exact numbers spent on integrity are not publicly available, Mark Zuckerberg's statement that the company has invested "billions" in corporate sustainability initiatives means that the investment is a noteworthy percentage of Meta's \$18.6 billion in costs and expenses.^{8,4}

Definition of Sustainability

Defining corporate sustainability for Meta is a fundamental aspect of this analysis. The environmental dimensions of the company's operations are a relatively small proportion of the company's overall customer base and revenue totals, as is the case for many software-first companies. Thus, focusing purely on the environmental components would acquit them of key social impact areas. Thus, this analysis will leverage Ashrafi et al's definition of corporate sustainability that encompasses "an organization's approach to creating value in social, environmental, and economic spheres in a long-term perspective, supporting greater responsibility".⁹ In utilizing this definition, "corporate sustainability" then includes many of the initiatives that are referred to as "integrity".

The company has specific environmentally focused sustainability initiatives internally, in the energy use of its data centers, the footprint of employee operations, and the impact of its physical products and related manufacturing; the company is also extending this to the broader supply chain. In terms of environmental sustainability, the cost-to-total-revenue ratio of these environmental initiatives remains minor compared to what similar initiatives would cost at competitors with greater physical presences, such as Amazon. The company has been able to make strong progress on these initiatives, in the surpassing of the goals it set in 2018 and the aforementioned achievement of carbon neutrality in 2020.⁷

The criticism Meta has drawn for other aspects of its corporate sustainability efforts are fairly unique to the social media industry: namely, their content moderation processes and privacy practices. Learnings from these challenges will extend to other social media companies and, to some extent, other software companies more broadly. The explicit responsibilities of platform companies will become increasingly important as the company and industry expands into broader consumer products, such as wearables, and the Metaverse. Integrity efforts across these platforms also oversee dynamics intersecting across its core user base, advertisers across the Family of Apps, developers managing third-party apps, and other businesses operating across the general Family of Apps and, especially, the Commerce products. Thus, Meta's investment in corporate sustainability across these dimensions does, and must, cross all organizations and encompass external stakeholders. Further, for any company, to support these efforts effectively, there must be alignment across all levels of leadership.³

In parallel, the company is also investing in greater external reporting, such as through the Ads Library, though additional internal projects are seeking to expand the breadth of this reporting significantly.^{10, 3} These efforts have significant customer and stakeholder demand behind it, including advocacy groups, experts, and legislators there is also significant customer and stakeholder demand behind them. In July 2020, there was a major advertiser boycott against Meta through the #StopHateForProfit campaign, which saw over a thousand of advertisers reduce or eliminate spending on the platform; most reports found that the reputational impact, though, was greater than any impact to the company's bottom line.¹¹ Closer to the 2020 elections, backlash against the ban on Trump's profile as well as Biden's concerns about vaccine misinformation led to a bipartisan #DeleteFacebook movement.¹² More generally, there has also been a rise in users pivoting to platforms with perceived (or realized) differences in content moderation, such as Twitter and Parler.¹³ All of these dynamics have pressured Meta into investing much further in solving these challenges.

Leadership

Meta's executive officers have expressed support for these sustainability initiatives. Integrity initiatives have broad leadership representation, primarily rolling up into the Vice President of Central Product Services, Javier Olivian, who reports to Meta's founder and Chief Executive Officer, Mark Zuckerberg, as well as dedicated support from other organizations, such as our Global Operations organization. Olivian has been at Meta since 2007, and so has grown into this role over his tenure.^{3, 14}

Conceptually, integrity efforts are broken into a few components: organic content, the unmonetized content posted by individual users; paid content, such as advertising and revenue sharing programs; and commerce products, such as business-to-consumer and consumer-to-consumer products like Instagram Shops and Facebook Marketplace. Traditional environmental sustainability initiatives fall in a third category.³ The greater representation for integrity initiatives over more traditional sustainability initiatives in the organizational structure could illustrate the lesser emphasis on environmental initiatives over the broader integrity issues that also fall within Meta's overall corporate sustainability endeavors. This also caters to the scale of these challenges, however. In terms of Meta's overall social impact, the scale of content moderation's impact on society is much larger proportionally than the company's carbon footprint. However, Francis Haugen made several allegations that leadership avoided or deprioritized major issues facing the company's platforms; one example cited an employee stating attempts to intervene and stop risks were "prematurely stifled or severely constrained."¹⁵

Strategy and Metrics

Meta has extensive measurement and associated metrics supporting corporate sustainability efforts. Externally, the company could further publicize these measurements and progress toward distinct goals. Leadership has continually committed to progress on these social issues as one of the company's top priorities; however, this priority also exists alongside numerous other company priorities, from the Metaverse to general product growth. Thus, the commitment to these areas as a priority is distinct in many ways from the work that is operationally resourced and conducted.³

As discussed previously, Meta tracks the carbon emissions and renewable energy resources across its operations and reports on these externally. These reports include updates on the company's carbon emissions, renewable energy targets, and water consumption, used for "evaporative cooling and humidification" in the data centers. In addition to the goals previously discussed, the company also hopes to restore 2.25 million cubic meters of water each year, to counterbalance the amount consumed. The company also seeks to contribute to climate goals outside of their immediate operations, with educational programs such as the Climate Science Information Center, which has seen 60 million visitors globally and working with the United Nations and other tech companies on the 2030VisionGroup to drive toward the Sustainable Development Goals, among others.⁷ As Meta achieves many of the environmentally-centric targets it set out to, from carbon neutrality to renewable energy usage to water restoration, the company should push the boundaries of what exactly this can encompass and which goals to set next.

Measuring the integrity component of Meta's corporate sustainability commitments requires distinct approaches. New America reports that Facebook has the largest integrity operations of the social media industry, though it is also the largest company overall.¹⁵ The effectiveness of these investments, however, is much more important than the money behind them. There are myriad ways to measure the harm of a social media platform. A Meta spokesperson defined "'prevalence' as the most important metric because it represents not what the company caught but what it missed and people saw on the platform", and a company report found that severe violations (such as violence, nudity, and hate speech) comprised only 0.03-0.05% of views on its platforms.¹⁶ However, another study notes that "11% of users were seeing content marked as 'disturbing,' 39% were seeing content that could be considered 'hateful' and 32% were seeing 'borderline' content containing some form of nudity every day on the platform."¹⁶ These metrics show the importance of measuring these issues in a way that appropriately depicts the true scope of impact, even when all of the metrics may technically be "accurate".

Especially with public leadership support, harm reduction is considered essential to organizational strategy. Mark Zuckerberg also announced a plan to tie bonus structure to individual contributions to social issues, such as misinformation and hate speech, as a way of incentivizing further work on these efforts.¹⁷ However, from personal visibility it seems that the

corporate sustainability goals are only components of employee performance reviews if they specifically work in this space or on related projects. This distinction is important when much of the harm stems from work that lives with product teams, who exist separately from integrity teams who are attempting to resolve issues downstream, without the authority to fix some of the fundamental upstream gaps. At least based on internal and external visibility, harm stemming from shortsighted product decisions is not visibly discussed as grounds for negative performance reviews, because those decisions typically cannot be *directly* tied to the harm users perpetuate on the platforms. Many product teams have long-term quality guardrails built into their team structures and goals; integrity issues are, at times, in conflict with these, sometimes due to necessary tensions that are a balancing act between competing priorities. The company should continually evaluate the balance of these priorities and how performance incentives facilitate that balance.³

Success for Meta must be defined in very problem-specific ways and with a variety of metrics to capture a more holistic image. As the contrast between the company's self-reported progress versus the media's quantitative criticism illustrates, positive integrity initiatives and continued harm on the platform can, and do, exist simultaneously. The company points to success in its voter registration and COVID-19 information campaigns, citing that 4.4 million voters registered through its campaign and that the company has connected 2 billion people to authoritative COVID-19 information.^{18, 19} However, external sources also point to significant harm still stemming from the platform, including an estimated 10.1 billion views to top misinformation pages, versus 162 million views to content where the company applied a misinformation flag.²⁰ While the company is tangibly investing in this harm, there is considerable external doubt regarding the extent to which these initiatives are effectively solving these issues.

Relations With Partners

The company also expresses ownership over its broader supply chain. This extends from ensuring responsible practices from suppliers to recycling practices for material sourcing and end-of-life practices to anti-slavery and human trafficking initiatives across the supporting work force.²¹ However, Meta has also faced extensive criticism with the mental health of its reviewer workforce supporting its content moderation practices. One lawsuit against the company found that approximately "half of all Facebook moderators may develop mental health issues". The company settled this lawsuit for \$52 million, distributed across 11,520 reviewers, of which half may then qualify for additional compensation based on more severe mental health issues, such as post-traumatic stress disorder. The company has additionally promised additional counseling resources and tools to filter out certain content.²² While these moderators are typically contract workers overseen by external agencies, the company has acknowledged their responsibility over them, at least of late and to certain degrees; however, there is clearly still extensive need for the company to improve this oversight.

Even following new company commitments, additional reports from these moderators cite a lack of progress. Certain moderators still spend high percentages of their day reviewing graphic content, from “hate speech, to animal mutilation, to videos of people committing suicide, child pornography.”²³ Counseling availability and the ability to expense therapy could be considered superficial offers, rather than fundamental changes to the work environment. One article even likened these workforces to “digital sweatshops” and sees the solution as Facebook hiring these contractors directly as a way of maintaining closer control over their work experience.²³ Viewing graphic content as an occupation, however, is likely always going to have negative mental health impacts, and so a pertinent question is: must humans review this content at all? Facebook outlines its review process as involving an automated component and then only passing to humans for more nuanced review.²⁴ However, based on anecdotal reports it is clear that, at least to a certain extent, the content that makes it to moderators is often more definitively graphic.²³

Automated models are often optimized based on accuracy, with key metrics of false positive (incorrectly flagged as policy-violating) and false negative (incorrectly approved as non-violating) rates. This is an efficient way to manage general content review, to optimize the amount of harm that goes live on platforms versus the amount of content incorrectly blocked. For potentially graphic content, however, the risk of the content going live *and* the risk of it being reviewed by human moderators are both strongly negative outcomes. Thus, one potential solution to improve working conditions for moderators is to starkly increase the automated rejection rates for potentially graphic content, at the expense of false positive rate, and allow users to appeal for any content that was incorrectly enforced on.³

Internal Perceptions of Sustainability

Particularly with the negative news cycle around Meta’s handling of these sustainability initiatives, the related integrity work is widely considered important internally. Some employees, based on internal discussions as well as public statements by whistleblowers, agree that the company is falling short in many dimensions of this work, and consider it essential to the long-term positive impact of the company. The integrity and privacy work are also dedicated components of the employee on-boarding process.³

Operationally, many product areas have formal processes around integrity reviews and regulations. Many of these impose necessary restrictions on product development and ensure uniform standards across teams. However, some of these processes, and the necessary work that exists outside of these formal processes, is often treated as a barrier to progress. Roadmap prioritization processes often highlight this dynamic, in non-urgent integrity work often getting deprioritized in favor of product development work. While these decisions often have business justifications behind them, they inherently reflect where integrity metrics land in the stack-ranking of business priorities. Integrity initiatives and their tangible goals *are* important, *and* there are competing company priorities that sometimes supersede them.³

These corporate sustainability initiatives are established programs, with formal organization structures and leadership reporting lines, which confirms its permanence in the company's operations. Similarly, the growth and investment in the area outpaced growth in other areas for years following the Cambridge Analytica scandal. However, as integrity organizations have matured and many of the processes behind them have gone more stable-state, headcount growth in these organizations has slowed considerably, even though the public backlash to these issues has not.³

Future of Sustainability in the Organization

Facebook has made significant progress in its environmental initiatives as well as other corporate sustainability programs, including these integrity challenges. However, there is clearly much more work to be done, especially on these broader integrity efforts, which intertwines with the broader accountability questions facing Facebook currently. Ben Thompson from The Stratchery hypothesizes that “the future will... look considerably different than the post-World War II order dominated by large multinational corporations... Instead the future looks more like a rainforest, with platforms that span the globe and millions of niche businesses that sit on top.”²⁵ If this is the trend of our economy, how do we more thoroughly define the scope of responsibility for these companies supporting small businesses? Extending Thompson's rainforest analogy, a question with ever-increasing importance lingers: What responsibility do these understory companies have for the broader environmental and social impact of the actors operating via their services? By answering this question for digital platforms and associated harm and impact, we can initiate a more thorough conversation around the broadening of corporations' responsibilities for their users.

Meta specifically needs to make significant progress on these corporate sustainability initiatives. Progress can come from several areas. First, Meta should engage further with external stakeholders on what the related standards should be. This includes pushing for regulation from national governments as well as engaging further with non-profit experts on the best ways in which to approach specific policies, both of which the company is working on to some extent. Due to the scrutiny Meta has faced, even following significant investment in these corporate sustainability initiatives, leadership has also called for regulators to better define the expectations for these areas. Specifically, Section 230 of the 1996 Communications and Decency Act is often debated in the context of social media platforms' accountability, which essentially immunizes platforms from liability regarding the content that users post on it. Some believe that the law absolves platforms to the extreme, precluding them from being held accountable for things like misinformation because users posted the specific content, even though the platforms' algorithms often amplify it; others worry about the impact culpability for user-generated content would have on platforms' ability to operate at all.²⁶ Overall, though, the call for updated regulation is quickly

accelerating, even from Meta itself, with an ad campaign and public site dedicated to publicizing their support for regulation.²⁷

Second, the company should open-source more of their content moderation operations. This would enable more collaboration with industry competitors, as well as empower smaller platforms who would struggle to support integrity operations at their scale; this would drive down harm across the social media industry more broadly and enable greater public scrutiny over more tactical moderation decisions. The Oversight Board seeks to accomplish the latter part of this, by giving an objective third-party the ability to override Meta's moderation decisions.²⁸ However, this scrutiny needs to happen at a greater scale and with greater transparency to drive meaningful change.

Third, the company should further integrate integrity goals into product teams rather than serving as centralized functions. Natural tensions exist between integrity goals and traditional product goals, between necessary content moderation to free speech, between ad load and user experience, and so on. Leadership provides guidance on how the company should strike this balance, and this flows through into the tactical work of how things are prioritized.³ This org structure, though, would further ensure that integrity work is treated as a necessary constraint metric within the overall product's goals, rather than yellow tape or is otherwise a blocker to the team's primary goals.³ Corporate sustainability, through the lens of these integrity issues, will hopefully become further and further embedded into the company, which will result in integrity measures being built into products from the beginning, with direct product owners having specific integrity goals that incentivize their product decisions, rather than operating at odds with them.

With the announcement of the company's new direction toward the Metaverse, and the associated rebrand of the parent company to "Meta", these corporate sustainability issues will become increasingly important. The company intends on becoming more ingrained in users' everyday lives and plans to extend its product portfolio significantly to do so.²⁹ External media have speculated that Facebook's existing portfolio is not in a healthy enough state, integrity-wise, to warrant this pivot; the New York Times specifically reported on the decreasing prioritization of election integrity at a time when the Metaverse is increasing in priority.³⁰ This stems from concerns that integrity challenges, and existing solutions, of the preexisting product portfolio will also not scale cleanly to these new products and surfaces: the nature of harm in a virtual environment, for example, is significantly different than that of a two-dimensional platform. While Meta will certainly invest in integrity across these spaces, and has already begun to, the prioritization of these initiatives against more product-centric goals such as growth and engagement remains to be seen.³ To build products that users truly feel comfortable integrating into their daily lives, Meta must make corporate sustainability its leading principle rather than a trailing one.

Sources

1. “Meta Platforms, Inc. (FB) Company Profile & Facts.” Yahoo! Finance. Yahoo!, December 17, 2021. <https://finance.yahoo.com/quote/FB/profile/>.
2. “Facebook.” Encyclopædia Britannica. Encyclopædia Britannica, inc. Accessed December 17, 2021. <https://www.britannica.com/topic/Facebook>.
3. Nicholas Rossano (self-citation), direct employment experience and expertise, December 17, 2021.
4. “Facebook Reports Third Quarter 2021 Results.” Facebook. Accessed December 17, 2021. <https://investor.fb.com/investor-news/press-release-details/2021/Facebook-Reports-Third-Quarter-2021-Results/default.aspx>.
5. Collins, Katie. “How Much CO2 Do You Produce Using Facebook? Less than in 2016, Report Shows.” CNET. CNET, June 21, 2021. <https://www.cnet.com/tech/services-and-software/how-much-co2-do-you-produce-by-using-facebook-less-than-in-2016-report-shows/>.
6. Ian Tiseo. “Facebook GHG Emissions 2019.” Statista, October 15, 2020. <https://www.statista.com/statistics/580123/facebook-carbon-footprint-and-ghg-emissions/>.
7. Palmieri, Edward. “Achieving Our Sustainability Goals.” Facebook Technology, December 8, 2021. <https://tech.fb.com/sustainability-2020/>.
8. “Facebook Hobbled Team Tasked With Stemming Harmful Content.” Bloomberg.com. Bloomberg. Accessed December 17, 2021. <https://www.bloomberg.com/news/articles/2021-10-25/facebook-whistle-blower-files-reveal-internal-struggle-profit-vs-public-safety>.
9. Ashrafi, Mehrnaz, Michele Acciaro, Tony R. Walker, Gregory M. Magnan, and Michelle Adams. “Corporate Sustainability in Canadian and US Maritime Ports.” *Journal of Cleaner Production*. Elsevier, February 16, 2019. <https://www.sciencedirect.com/science/article/pii/S0959652619304871#bib5>.
10. “About the Ad Library.” Facebook. Accessed December 17, 2021. <https://www.facebook.com/business/help/2405092116183307>.
11. Hsu, Tiffany, and Eleanor Lutz. “More than 1,000 Companies Boycotted Facebook. Did It Work?” *The New York Times*. The New York Times, August 1, 2020. <https://www.nytimes.com/2020/08/01/business/media/facebook-boycott.html>.
12. Towey, Hannah. “The Messy History of #Deletefacebook: Why the Trend Is One Thing the Left and Right Are Agreeing On.” *Business Insider*. Business Insider, July 20, 2021. <https://www.businessinsider.com/why-deletefacebook-is-one-thing-left-and-right-agree-on-2021-7>.
13. Harwell, Drew, and Rachel Lerman. “Conservatives Grumbling about Censorship Say They're Flocking to Parler. They Told Us so on Twitter.” *The Washington Post*. WP Company, November 25, 2020.

<https://www.washingtonpost.com/technology/2020/11/23/parler-conservatives-still-on-twitter/>.

14. "Javier Olivan - VP of Central Products - Facebook | LinkedIn." Accessed December 17, 2021. <https://www.linkedin.com/in/javierolivan>.
15. Bloomberg.com. Bloomberg. Accessed December 17, 2021. <https://www.bloomberg.com/news/articles/2021-10-25/facebook-whistle-blower-files-reveal-internal-struggle-profit-vs-public-safety>.
16. "Everything in Moderation." New America. Accessed December 17, 2021. <https://www.newamerica.org/oti/reports/everything-moderation-analysis-how-internet-platforms-are-using-artificial-intelligence-moderate-user-generated-content/introduction>.
17. Musil, Steven. "Facebook Ties Employee Bonuses to Progress on Social Issues." CNET. CNET, February 6, 2019. <https://www.cnet.com/tech/services-and-software/facebook-ties-employee-bonuses-to-progress-on-social-issues/>.
18. Guynn, Jessica. "Facebook Election 2020: Mark Zuckerberg Online Registration Drive Signs up Record 4.4 Million Voters." USA Today. Gannett Satellite Information Network, October 26, 2020. <https://www.usatoday.com/story/tech/2020/10/26/voter-registration-facebook-drive-trump-biden-zuckerberg-election-2020/6041428002/>.
19. "Mark Zuckerberg Announces Facebook's Plans to Help Get People Vaccinated against COVID-19." Meta, April 6, 2021. <https://about.fb.com/news/2021/03/mark-zuckerberg-announces-facebooks-plans-to-help-get-people-vaccinated-against-covid-19/>.
20. Bergengruen, Vera, and Billy Perrigo. "Facebook Let 2020 Election Misinformation Flow, Report Says." Time. Time, March 23, 2021. <https://time.com/5949210/facebook-misinformation-2020-election-report/>.
21. "Responsible Supply Chain." Facebook Sustainability, July 9, 2021. <https://sustainability.fb.com/responsible-supply-chain/>.
22. Newton, Casey. "Half of All Facebook Moderators May Develop Mental Health Issues." The Verge. The Verge, May 13, 2020. <https://www.theverge.com/interface/2020/5/13/21255994/facebook-content-moderator-lawsuit-settlement-mental-health-issues>.
23. "Facebook Content Moderators Say They Receive Little Support, despite Company Promises." NBCNews.com. NBCUniversal News Group, May 11, 2021. <https://www.nbcnews.com/business/business-news/facebook-content-moderators-say-they-receive-little-support-despite-company-n1266891>.
24. "How We Review Content." Meta, August 19, 2020. <https://about.fb.com/news/2020/08/how-we-review-content/>.
25. Thompson, Ben. "Facebook Political Problems." Stratechery, October 11, 2021. <https://stratechery.com/2021/facebook-political-problems/>.

26. Brown, Matthew. "Justice Department Intervenes in Trump Lawsuit against Big Tech to Defend Section 230." USA Today. Gannett Satellite Information Network, November 22, 2021.
<https://www.usatoday.com/story/news/politics/2021/11/22/justice-department-defends-section-230-trumps-big-tech-lawsuit/8717364002/>.
27. "We support updated regulations on the internet's most pressing challenges." Internet Regulations. Accessed December 17, 2021. <https://about.facebook.com/regulations/>.
28. "Ensuring respect for free expression, through independent judgment." Oversight Board. Accessed December 17, 2021. <https://oversightboard.com/>.
29. Newton, Casey. "Mark in the Metaverse." The Verge. The Verge, July 22, 2021.
<https://www.theverge.com/22588022/mark-zuckerberg-facebook-ceo-metaverse-interview>.
30. Frenkel, Sheera, and Cecilia Kang. "As Midterms Loom, Elections Are No Longer Top Priority for Meta C.E.O." The New York Times. The New York Times, June 23, 2022.
<https://www.nytimes.com/2022/06/23/technology/mark-zuckerberg-meta-midterm-elections.html>.