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- » Learning the history of Bluesky
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- » Seeing how Bluesky compares to other microblogging platforms

Chapter 1

Skywatching

Welcome to the kaleidoscope of butterflies called Bluesky. (Did you know a group of butterflies was called a *kaleidoscope*? Neither did we.) Originally a project within Twitter, Bluesky is a new microblogging platform that's taking on Twitter (now called X) as well as other competing platforms, including Mastodon and Meta's Threads.

Microblogging describes the sharing of short posts with a character limit, and these posts can include links to other websites as well as images, videos, and other media formats such as animated GIFs. Microblogging social networks also allow you to like other posts, send short replies to posts, and share posts with others.

In this chapter, you get the TL;DR (that's 21st-century slang for *too long; didn't read*) version of the history of Bluesky and why its popularity spiked near the end of 2024. Next, you learn what makes up Bluesky. Finally, you see how Bluesky compares to other microblogging social media platforms, including X, which has been a driver of Bluesky growth. Let's fly.

A Brief History of Bluesky

Since Bluesky's logo is a butterfly, you could think of Twitter as creating the cocoon from which Bluesky emerged. Bluesky has come a long way since its inception in 2019 (hey, that was way before the COVID-19 pandemic) and its teenage growing pains. This section takes you on a quick tour, and then describes the features added to Bluesky since its public launch in early 2024.

Step into the Wayback Machine

Just like the production of this book, the development of Bluesky has been on a fast track. Follow along the timeline with us:

- » **December 2019:** Twitter CEO Jack Dorsey announces the plan to create Bluesky as an open and decentralized standard for social media, including Twitter.
- » **August 2021:** Software engineer Lantian Jay Graber becomes the leader of the Bluesky project. Twitter provides \$13 million in seed funding. (Fun fact: The name Lantian means *blue sky* in Mandarin Chinese, but her becoming Bluesky's leader is only a spooky coincidence.)
- » **October 2021:** Graber incorporates the Bluesky project as an independent public benefit corporation called Bluesky Social and becomes its first CEO. Jack Dorsey sits on the board.
- » **March 2022:** Bluesky hires its first three employees.
- » **October 2022:** Elon Musk buys Twitter and immediately severs all legal and financial ties with Bluesky Social. Bluesky has no problem with this.
- » **February 2023:** Bluesky starts construction as an invite-only iOS beta app. In April, the beta app is released for Android. By July 2023, Bluesky has about 200,000 users.
- » **February 2024:** Bluesky launches its social media app and opens registration to the general public.

- » **May 2024:** Jack Dorsey leaves the Bluesky board. In an interview with *Pirate Wires* online magazine, Dorsey said Bluesky was “literally repeating all the mistakes [Twitter] made as a company.” (www.piratewires.com/p/interview-with-jack-dorsey-mike-solana).
- » **August 2024:** Brazil’s supreme court blocks Twitter, now called X, in its country. As a result, Bluesky gains over four million users in under two weeks.
- » **October 2024:** X makes changes to its block feature and its terms of service to analyze users’ content for AI training purposes by default. Four days after that announcement, over 1.2 million users join Bluesky. On October 24, Bluesky announces its user base is now 13 million.
- » **November 2024:** Following the U.S. presidential election results, millions of users join Bluesky as an X alternative. On November 19, Bluesky’s user base is 20 million, which is a tripling of its user base in just three months.

As of February 2025, Bluesky surpassed 30 million users — and is dealing with the problems that come with more users. With every growth wave comes a predictable increase in bad actors and moderation reports, so Bluesky has hired more human moderators, improved automated tooling for spam and scam detection, and more.

Features added along the way

Bluesky’s rapid growth makes us wonder if new developers get mandatory bee costumes on their first day. The development team would probably agree that they’re the dictionary definition of the idiom “busy as a bee.” Here are the features these bees have added in under two years:

- » **Report and review functions:** Users can report posts and accounts that violate Bluesky’s community guidelines. Bluesky uses a combination of automated tooling to flag potentially harmful content and a human moderation team.

- » **Starter packs:** These curated collections of accounts help you quickly find users with shared interests. Most competitors are thinking of replicating this Bluesky feature.
- » **Moderation lists:** Users can create lists to block or mute specific contents as well as other accounts.
- » **Labels:** You can label your posts in different categories, which is helpful if you have sensitive information that's for only specific users, such as those 18 and older.
- » **Reply controls:** This feature lets you control who can reply to your posts — everyone, followers, or no one.
- » **Sorting preferences:** You can sort your Bluesky home page feed and message threads using settings such as most recent or most popular.
- » **Hidden posts:** If you never want to see a post again, click or tap it and select Hide Post to remove it from your feed.
- » **Likes tab:** You can like posts and access them anytime by selecting the Likes tab.
- » **Suggested tags:** This feature suggests users to tag in your posts. Type @ in the post, and a list of suggested users appears so you can choose the Bluesky user you want to tag.
- » **Notifications:** You can enable notifications to receive alerts on your phone for different events, such as someone liking your latest post.
- » **Emojis:** When you compose a post in the Bluesky website, click or tap the emoji icon to select an emoji to add.
- » **Chats:** You can have one-on-one text conversations with another Bluesky user. You can also report inappropriate chats you receive to Bluesky moderators.
- » **Video and audio player:** You can place a video link or an audio link in your post. You can also play video and audio in another user's post.
- » **Custom domains:** You can personalize your Bluesky handle (for example, @name.bsky.social) with your own domain name.

Understanding How Bluesky Works

Bluesky has been developed from the ground up as an open source framework for building social media apps. As part of this framework, you have your choice of algorithm so you can best curate the content you see. Let's bring out our magnifying glass to look more closely at the AT Protocol, the system that powers the Bluesky butterfly.

Open source versus a closed ecosystem

Bluesky developed the Authenticated Transfer Protocol, also called AT Protocol or ATProto. (We use the latter because we're efficient.) Indeed, Bluesky was created as a proof of concept for ATProto.

ATProto is both a protocol and an open standard for building social network apps, and it comes with a standard format for user identity, follows, and data on social apps. As you may have guessed, when different social networking apps use the same standard protocol such as ATProto, they can interoperate and users can move among them.

ATProto focuses on six key areas:

- » User experience
- » Platform interoperability
- » Discoverability
- » Network scalability
- » User data portability
- » Social graphs

In sum, ATProto is an open standard for social media that many apps and networks can adopt. So, just as Bluesky is built upon ATProto, so too can other social networks. In fact, many already

have! New apps are popping up for longform blogging, a web forum, an audio space app, and more built on ATProto.

Bluesky has pledged to transfer ATProto’s development to an independent standards body so that ATProto isn’t controlled by any one company. As of this writing, Bluesky hasn’t released details about what body will be chosen and when the transfer will take place.



REMEMBER

Eager to learn more about ATProto from a technical perspective? Visit the ATProto website at <https://atproto.com/guides/faq> to read answers to their frequently asked questions.

Your choice of algorithm

When Bluesky launched its invite-only iOS app, CEO Jay Graber talked about algorithmic choice. You can find the article at <https://bsky.social/about/blog/3-30-2023-algorithmic-choice>, but we summarize it for you here because we like you and because of that whole TL;DR thing we promised at the top of the chapter.

Graber noted that there’s usually little transparency about the content shown to you on other social networks, which has led to user backlash about the perceived manipulation of feed timelines by the algorithm. (Oh, my, do we empathize.) You may be able to filter out some features, such as who you follow, but when it comes to getting a simple chronological feed from people you follow, good luck trying to figure out why you can’t.

Graber and the ATProto team have proposed a “marketplace of algorithms” that gives users control over what they see in their feeds. This marketplace focuses on four areas:

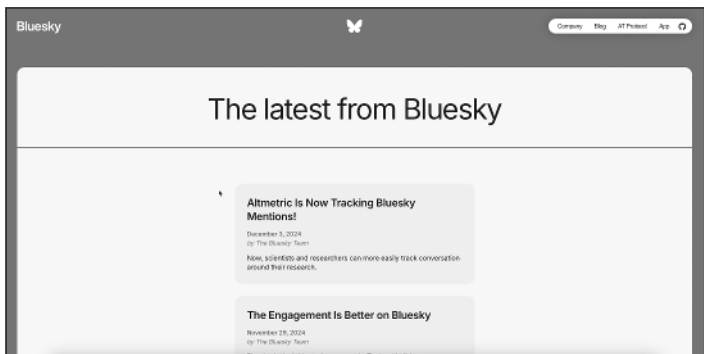
- » **Independent feed and moderation systems:** These systems are being built from the ground up using application programming interfaces (APIs), which are common tools of the software development trade.

- » **Feed selection system:** Bluesky is developing a feed selection system so users can explore third-party feeds and access them easy-peasy.
- » **Freedom to experiment:** Developers can experiment with algorithms and publish them so anyone can use them. GitHub has a few sample applications.
- » **Not just feeds:** Graber noted that Bluesky is using the same approach with feeds to address repudiation and to label misinformation.

Get the latest updates from the development team

Getting feeds that work sounds exciting, doesn't it? (It's also kinda sad that this is the state of affairs, but let's focus on the positive.) If you want to get more updates from the Bluesky development team about their progress, a good place to start is the Bluesky Social blog at <https://bsky.social/about/blog>, shown in Figure 1-1. The blog is updated when news breaks, and there's at least one new update each month.

FIGURE 1-1:
The Bluesky Social blog has the latest news.



Want to develop a social app using the Bluesky Developer APIs? Go to the Bluesky blog and get up to speed by reviewing articles at <https://docs.bsky.app/blog>, as shown in Figure 1-2.

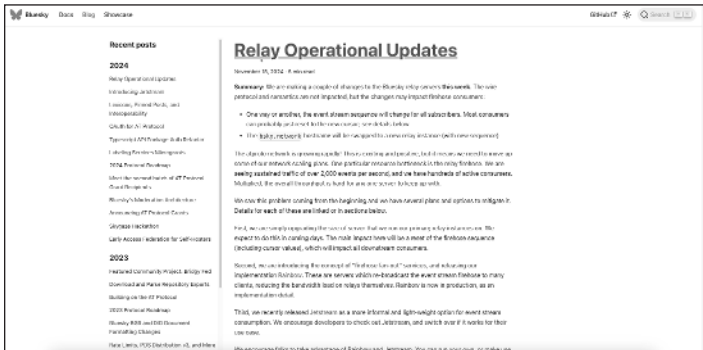


FIGURE 1-2:
The Bluesky
blog.

When you're on the Bluesky Documentation site, you'll see a link in the upper-right corner of the screen for GitHub, a popular developer platform where developers create, store, and share code. When you click or tap the link, the bluesky-social GitHub page opens in a new browser tab, as shown in Figure 1-3. You can also visit the Bluesky GitHub web page directly at <https://github.com/bluesky-social>.

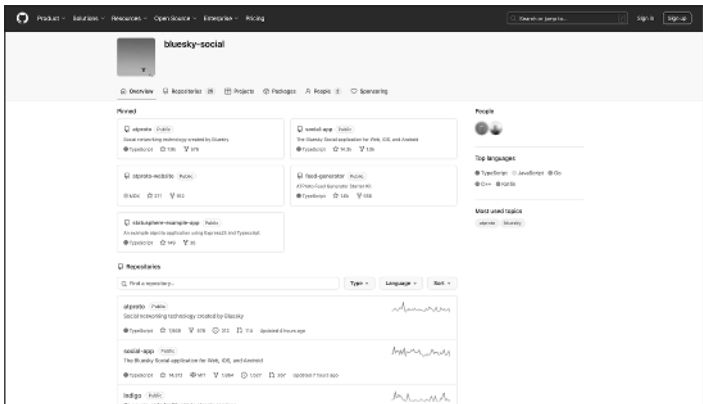


FIGURE 1-3:
The
bluesky-
social
GitHub
web page.

On this page, you'll be able to access repositories and packages, view examples, and connect with other developers.



REMEMBER

Because Bluesky's code is open source, users have complete transparency as to what developers are working on — down to the minute.

Comparing Bluesky to Other Microblogging Platforms

Bluesky is one of several microblogging social media platforms. The current big four microblogging platforms are X (formerly Twitter), Threads, Mastodon, and Bluesky. (We don't include sites that are primarily image-centric, such as Instagram, Tumblr, and Pinterest.)

In this section, you see how Bluesky stacks up against its three competitors in six areas: user base, post character limit, the user experience, privacy and data collection, moderation, and centralization. This information is current as of January 2025.

Bluesky

Bluesky is the newest entrant into the microblogging game, opening to the public in February 2024.

- » **User base:** More than 30 million.
- » **Character limit:** 300.
- » **User experience:** Bluesky focuses on simplicity with features common to other platforms including comments, likes, and reposts. Bluesky is also ad-free.
- » **Privacy and data collection:** Bluesky emphasizes user control and data privacy.
- » **Moderation:** Bluesky provides a strong foundation of moderation across the network, and users can subscribe to additional moderation decisions from organizations they trust.
- » **Centralization:** Bluesky is decentralized and prioritizes user experience, so the app itself still feels straightforward and easy to use. Users have the option of running their own infrastructure while remaining part of the larger Bluesky network.

X

Twitter started in 2006 and was rebranded to X in 2023. It's still the largest microblogging platform despite numerous controversies and reported user exoduses (on the level of the rabbit scene in *Monty Python and the Holy Grail*), which we won't go into in this book.

- » **User base:** Estimated at 588 million — X doesn't release user base information.
- » **Character limit:** 280.
- » **User experience:** X has a wide range of features, including poll questions, livestreaming, and ads.
- » **Privacy and data collection:** X collects user data, and there are concerns regarding privacy.
- » **Moderation:** X uses a centralized moderation system.
- » **Centralization:** Twitter, and now X, has always had a centralized platform.

Threads

In response to the purchase of Twitter by Elon Musk in October 2022 and ensuing controversies, Meta CEO Mark Zuckerberg talked with Instagram head Adam Mosseri about creating a new microblogging platform. It took Meta only nine months to launch Threads in July 2023.

- » **User base:** 275 million as of November 2024.
- » **Character limit:** 500.
- » **User experience:** The interface is similar to Bluesky and X. Threads leverages its synergy in the Meta ecosystem to provide links between Threads, Instagram, and Facebook.
- » **Privacy and data collection:** Threads collects significant user data.
- » **Moderation:** Threads uses a centralized moderation system in line with other Meta social networks.

- » **Centralization:** Meta centralizes all three of its social networking platforms.

Mastodon

Mastodon was released to the public in October 2016 and quickly became the dominant social networking platform in the *Fediverse*, which is a collection of social media platforms that can communicate with each other. As of this writing, Mastodon and Threads are connected to the Fediverse, and independent developers have built bridges and alternative clients that connect Bluesky to the Fediverse.

- » **User base:** 10 million as of December 2024.
- » **Character limit:** 500.
- » **User experience:** In addition to likes, reposts, and replies, Mastodon also has polls and lets you save posts.
- » **Privacy and data collection:** Mastodon uses independent servers, or *instances*, so each server has its own rules, including about privacy and data retention.
- » **Moderation:** Mastodon allows server administrators to set their own moderation rules.
- » **Centralization:** Each Mastodon server is independent, so there are independent communities.

