ByteDance is an internet technology company founded by 29-year-old Zhang Yiming in 2012 that operates creative content platforms where it developed the video-sharing social networking services and apps TikTok and Chinese-specific counterpart Douyin. ByteDance became a world-leader in apps that leveraged its AI capabilities. Its success was largely attributed to its artificial intelligence and machine learning algorithms that delivered customized content feeds to users of all its products

**Strategies**

Unlike Amazon and its counterparts that used collaborative technology (user characteristics and similar user profiles), ByteDance used content-based technology that took into account user behaviour (reading, clicking, liking) to predict their preferences.

Following success with texts in Toutiao (the news reading app), it applied its technology to all ByteDance products including Douyin (and TikTok) which used AI and machine learning to deliver preferred content, using algorithms in computer vision and natural language-processing technology to understand and analyse written content, images and videos, and then delivered customized content. As users interacted with the content (by taps, swipes, time spent on each article, comments) ByteDance’s large-scale machine learning and deep learning algorithms learnt more about their preferences to refine content delivery. This resulted in a high-quality content feed based on individual preferences and interests. The more content the system accumulated, the better the algorithms to enhance the content experience.

Launched by ByteDance in 2012, the mobile app Toutiao was one of the first Chinese algorithmdriven news apps to become a staple among Chinese users. Toutiao used AI to source and curate daily news and articles for users via 4,000 partner sites. Through the app’s machine-learning algorithm, Toutiao understood and personalized content for each user, creating a unique experience based on their taps, wipes, page views, location etc. Using an advertising-based business model, its AI capability also enabled advertisers to target consumers accurately. Success relied on learning effects, network effects and stickiness, particularly in the first year when it rapidly gained market share and thus could collect more data and refine the AI algorithm to improve its product and user experience. 11 It enjoyed network effects, with users on one side and content creators on the other, 12 creating a virtuous cycle (more users attract more content creators, which attract more users) that propelled it to market leadership in news and information content in China. Personalized news recommendations increased the time users spent on the app, and therefore its appeal to advertisers

* Douyin curated its content using artists (and influencers) by reaching out to art and music schools to provide high-quality content and working with agencies in China which specialized in grooming ordinary citizens for internet stardom.
* Another strategy was to treat top influencers as part of the company – actively promoting and subsidizing their traffic. Douyin videos were also popular for ‘life hacks’, such as the one involving ‘Hai Di Lao’ in which users uploaded videos of their own DIY dishes at the restaurant, inspiring others to do similar hacks.
* Douyin also launched hashtags as a theme to create videos, some of which went viral like the ‘Seaweed Dance.’ What set it apart from other video apps was that it allowed creators to embed product links into their videos, for seamless commercial linkage
* TikTok differed from apps such as Instagram and Twitter in its recommendations of both what its users should watch and what they should post, effectively minimizing the ‘thinking’ required
* In addition to gaming, TikTok also looked to expand e-commerce and other areas like music streaming and financial services. In March 2020, it launched Resso, its ‘social music streaming’ service in India (and beta-tested in Indonesia). Again, leveraging its AI capabilities, music auto plays as soon as its users opened the app. Its users were encouraged to give comments, share lyrics, and even generate their own content to share with each other

**Revenue**

In 2019, ByteDance booked revenues US$ 17 billion, doubling its 2018 revenue of US$ 7.4 billion30. Much of its success could be attribute to TikTok; with its astronomical user growth and engagement, the app drew advertisers away from Tencent and Baidu Inc. 31. TikTok’s videos generated revenue by selling brands the ‘commercial’ time in between its 15 second videos. Using its AI to specifically target users, the ads nonetheless give users the option to click to skip past them. Additionally, by April 2020, TikTok had cumulatively collected US$ 456.7 million from its users although most of the spending — about 72.3% — came from China32. United States had spent about US$ 86.5 million on TikTok, thus the second most important market for TikTok from the revenue standpoint33. While 75.5% of all TikTok’s downloads were through Google Play Store, most of the spending were from Apple’s devices (US$ 435.3 million of US$ 456 million)34.

**Challenges**

It fell afoul of China’s internet censors in April, resulting in its new aggregation unit shutting down for 24 hours and founder Zhang Yiming having to issue a ‘self-reflective’ public apology

TikTok hit a roadblock in March 2019 when it was fined a record US$ 5.7 million by the US Federal Trade Commission for collecting the personal data of children under 13. Its troubles escalated with the US government banning the app and forcing its sale. This led to TikTok suing the Trump administration in August 2020 even as it negotiated with potential US buyers. Barriers to its global expansion include fierce local competition, government regulations and USChina trade tensions

* plateauing user base and decreasing downloads
* It’s no surprise to anyone that TikTok’s demographic skews young, but did you know by just how much? According to a [Pew Research Center poll from 2021](https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/), there’s a huge gap between TikTok’s biggest demographic and older social media users:
* 48% of adults aged 18-29 use TikTok.
* 22% of adults aged 30-49 use TikTok.
* 14% of adults aged 50-64 use TikTok.
* 4% of adults aged 65 and above use TikTok.
  + So why is this a problem? Well, it means TikTok is way behind some of its competitors in some demographics. In that same poll from 2021, [over 80% of adults across all demographics — except those aged 65 and above — said they use YouTube](https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/). That means TikTok is losing out on advertising dollars that could be targeted at those demographics.
* TikTok creators aren’t getting paid enough
* While many of the [top creators in 2022](https://www.theleap.co/forbes-top-creators-income-streams/) were TikTokers, it seems like the platform isn’t generating as much revenue for them as some of its competitors.
* There was a lot of buzz around [TikTok’s Creator Fund](https://www.tiktok.com/creators/creator-portal/en-us/getting-paid-to-create/creator-fund/) when it first launched [back in 2020](https://newsroom.tiktok.com/en-us/introducing-the-200-million-tiktok-creator-fund), but the hype has quickly died down. Many influencers and content creators took to social media to complain that the fund wasn’t at all what they expected — [some creators reportedly only made $10-20 a month](https://www.businessinsider.com/tiktokers-say-low-creator-fund-pay-affecting-their-mental-health-2022-7).
* Speaking to [*Wired*](https://www.wired.com/story/tiktok-creators-fund-revenue-sharing-complaints/), Tiana E., a TikTok influencer with 50,000 followers, expressed her disappointment with the Creator Fund: “I ended up leaving the Creator Fund. I’d much rather my followers see my videos than make a few cents on views. I’m disappointed with the way it hurt people more than helped.”
* It seems like TikTok isn’t the best place for creators to make money, and they’re starting to wise up.
* Disappointed creators and a demographic that skews too young are almost insignificant compared to this huge challenge. It seems like American governments have it out for TikTok, and this might only get worse in 2023.
* [Kentucky is the latest state](https://apnews.com/article/technology-politics-kentucky-state-government-083bf53c8471e94303bcd35acc6eaacd) to ban TikTok from government-issued devices, citing concerns that the Chinese government might use TikTok to funnel in American user data and spread pro-China misinformation. This makes it the latest of [over 20 states that have also banned the app on government devices](https://www.theinformation.com/articles/tiktok-turns-to-new-tactics-to-spur-growth-as-boom-times-end).
* But it’s not just state governments that are looking into the platform. After the Chinese spy balloon debacle, [Congress might ban the app from all](https://www.usatoday.com/story/news/politics/2023/02/14/tiktok-ban-china-spy-relations/11134410002/)[U.S. devices.](https://www.usatoday.com/story/news/politics/2023/02/14/tiktok-ban-china-spy-relations/11134410002/)
* One of the things that made TikTok so popular in its earlier days was the short length of its videos. The challenge of making a 15-second clip inspired users to do more with less, remixing videos, sharing sounds, and turning TikTok into the place where [countless trends were born](https://later.com/blog/tiktok-trends/).
* However, with the short-form video format, TikTok is potentially leaving a lot of money on the table. A platform like YouTube or Twitch has fewer limitations when it comes to video length, allowing creators to explore all sorts of content. One of the best examples? [ASMR videos](https://www.vox.com/2015/7/15/8965393/asmr-video-youtube-autonomous-sensory-meridian-response).
* In the [2022 YouTube Culture & Trends Report](https://www.youtube.com/trends/report/2022/), 83% of Gen Z respondents said they use YouTube to watch content that helps them relax. The kind of content you put on in the background while you’re doing something else. TikTok just isn’t really the place to go for that kind of content.

**Recommendations**

* A few things, but there are two big ones to keep in mind. First, [a push towards what TikTok is calling PGC — or professionally-generated content — internally](https://www.theinformation.com/articles/tiktok-turns-to-new-tactics-to-spur-growth-as-boom-times-end). Unlike the lo-fi content that made the platform famous, this kind of content is meant to replicate the slick production value you’d typically see on YouTube.
* TikTok is also trying to [attract reputable media brands and publishers](https://www.theinformation.com/articles/tiktok-turns-to-new-tactics-to-spur-growth-as-boom-times-end) to the platform, hoping they’ll create some of that professional content that’ll bring in older demographics — [like the massive late-night talk show channels have for YouTube](https://deadline.com/2022/08/the-tonight-show-youtube-milestone-30m-subscribers-1235093387/). However, some brands [haven’t been too excited, citing the lack of opportunity to earn ad revenue on the platform](https://www.theinformation.com/articles/tiktok-turns-to-new-tactics-to-spur-growth-as-boom-times-end).
* Improving the way it pays creators is a big focus for TikTok. According to sources that spoke with [The Information](https://www.theinformation.com/articles/tiktok-turns-to-new-tactics-to-spur-growth-as-boom-times-end), TikTok is exploring two initiatives to improve the way it rewards creators for their content.
* The first one is a revamped Creator Fund. This new program could launch in the U.S. [as soon as next month](https://www.theinformation.com/articles/tiktok-turns-to-new-tactics-to-spur-growth-as-boom-times-end), aiming to better reward creators than its predecessor did.
* The other initiative is a potential [paywall feature](https://www.theinformation.com/articles/tiktok-turns-to-new-tactics-to-spur-growth-as-boom-times-end) that would allow creators to restrict access to certain videos unless followers pay a dollar or more.
* TikTok is scrambling to show that it takes these concerns seriously. Back in July 2022, the platform published [a press release](https://newsroom.tiktok.com/en-us/our-approach-to-keeping-us-data-secure) stating how it restricts access to user data within TikTok, to soothe fears that it’s sending data to Beijing.
* The platform’s latest defensive play? [Project Texas](https://www.lawfareblog.com/project-texas-details-tiktoks-plan-remain-operational-united-states), a $1.5 billion effort to satisfy the security concerns of the American government. Through this project, a new subsidiary of TikTok — TikTok U.S. Data Security Inc. — will have sole access to the user data of American users, moderate content on the platform, and access TikTok’s code and systems. This division will be [overseen by an independent board of directors](https://www.lawfareblog.com/project-texas-details-tiktoks-plan-remain-operational-united-states) and will be managed separately from the broader company.
* Time will tell if this will be enough.
* TikTok already [increased the maximum length of their videos to 10 minutes in 2022](https://www.engadget.com/tiktok-time-limit-10-minutes-174130936.html), showing that the platform knows it can only rely on short-form content so much. But there are a few interesting features they’re trying out right now that could help solve this problem.
* The first is podcasting. In January, [Business Insider](https://www.businessinsider.com/tiktok-testing-podcast-tool-feature-for-background-listening-2023-1) reported that content creators are seeing TikTok videos with a prompt to listen to them as a podcast.
* Another new feature TikTok has rolled out, [Photo Mode](https://www.theleap.co/tiktok-photo-mode-carousel/), is basically Instagram-lite. Instead of posting videos, [TikTok users can now post slideshows](https://mashable.com/article/tiktok-photo-mode-day-in-the-life), just like they might on Instagram.
* This is a sign that TikTok is trying to find ways to keep people on the platform for all sorts of content.