

67-262 Databases Project

Phase 1

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Background Research

TikTok is a social media platform that people use to communicate and share with their friends and family, browsing content on the internet. Since 2018, TikTok has become very popular among teenagers to create short-form videos across the globe. Nowadays, TikTok has employees across more than 30 countries, and the mission of the company is to “bring joy and inspire creativity globally”, meaning their focus is not only to create entertainment but also to foster an innovative and supportive online community. Additionally, the business model for TikTok allows it to adapt changes in consumer preferences and technological advancements given its dynamic and scalable nature. In the future, TikTok plans to dive into the realms of education, ecommerce and virtual experiences.

TikTok operates on a platform-based business model that utilizes user content creation as its main value to drive user engagement. In terms of the customer pain points, for content creators, the services offered by TikTok allows users to create, share, and discover short-form videos. It especially capitalizes on its artificial intelligence algorithms to recommend personalized content feeds, ensuring high user retention and engagement. The success of its content placement is evident through the highly viral sharing behavior amongst users. TikTok’s integration of other services like Spotify also increases its competitive advantage. With music being such a key part of content creation, the links to Spotify benefit not only the creators on the service but also the artists of the songs used in viral content.

Another pain point for users is the effective advertisement for brands and companies specifically towards commercial promotions and marketing opportunities. TikTok’s main revenue source is advertisements and in-app gift purchases. Advertisers select a target demographic and TikTok places this messaging in front of the advertiser’s desired audience. Gift purchases are made when users pay for TikTok coins, allowing for purchases of products that show up in the app. These efficient services are achieved through TikTok’s integration of Teespring: a service that handles all backend e-commerce. Creators only need to create a product and the application handles the rest. Visitors can also make quick purchases without ever having to leave the app. Last but not least, TikTok still faces a few competitors like Instagram Reels and Youtube shorts, which all allow users to create short-form, catchy videos with music and share them on their profile using mobile devices.

Identifying 3 Users and 10 User Stories

Users:

1. **Viewer:** Viewers on TikTok are avid consumers of short-form videos, seeking entertainment, inspiration, and information. They use TikTok to explore a wide range of content, from comedy sketches and dance routines to educational snippets and lifestyle vlogs. Viewers enjoy staying up-to-date with trends and following creators and content they like.
2. **Creator:** Creators on TikTok are individuals or entities who use the platform to express their creativity, share talent, and connect with a global audience. They leverage TikTok's interface and editing tools to produce engaging short videos. Many creators use TikTok as a platform to showcase their skills, gain recognition, and build a fanbase. Some creators also monetize their content through various means, such as brand partnerships, turning their passion into a source of income.
3. **Advertiser:** Advertisers on TikTok are business, brands, or individuals looking to promote their products, services, or messages to a vast and diverse audience. Advertisers leverage TikTok's advertising tools and formats to create engaging campaigns tailored to their target demographics. They aim to boost brand visibility, drive sales, and increase brand awareness.

User Stories: 4 complex+ 3 analytical

ID	Simple/Complex/ Analytical	As a <role>	I want <goal>	So that <reason>
US1	Analytical	As a creator	I want to see how the engagement of each video is.	So that I can know which content attracts more people and help me get more likes.
US2	Analytical	As a creator	I want to see the total money I could make for that video	So that I can plan out my spendings better.
US3	Analytical	As an advertiser	I want to see my which video is the most popular based on likes	So that I can make similar videos.
US4	Complex	As a creator	I want to livestream to my followers	So that I can engage them in real time and see how long the livestream attracts more users like when they tend to leave
US5	Simple	As a viewer	I want to leave comments to videos	So that I can express my opinion to that video
US6	Complex	As a viewer	I want to save my favorite videos to watch later	So that I can easily revisit the content that resonates with me

US7	Simple	As a creator	I want to schedule my video uploads for specific times	So that I can reach my audience when they are most active to maximize content visibility
US8	Complex & Analytical	As a creator	I want to see my average video counts	So that I can evaluate my performance
US9	Complex	As an advertiser	I want to create targeted ads based on user demographic	So that I can reach a relevant audience and maximize impact
US10	Simple (new)	As an advisor	I want to easily track the number of likes my ads receive per hashtag	So that I can quickly identify which hashtags are most effective in engaging my audience

Conceptual Model

https://lucid.app/lucidchart/9e4a1c21-1c32-4c96-bdb8-798e524ab8a2/edit?viewport_loc=-462%2C4%2C3111%2C1571%2C0_0&invitationId=inv_1e586b32-5650-4da5-b52d-9b6ac0d0a083

