

Business Model Innovation and Experimentation in Transforming Economies: ByteDance and TikTok

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ABSTRACT Firms from transforming economies can leverage the characteristics of their location to develop innovative business models before internationalizing. This note showcases ByteDance's innovative business model for its TikTok app, which became one of the most downloaded apps globally. ByteDance used its large and increasingly demanding home market to experiment with creative combinations of business model elements to develop a unique business proposition that positions the TikTok app as a hybrid of social networking and video-sharing. In addition, TikTok benefitted from China's IT strength supported by national high-tech policy to an AI-based recommendation algorithm as a non-location bound resource. TikTok shows that firms from transforming economies can launch successful global products through business model innovation.

KEYWORDS business model innovation, globalization, international strategy, TikTok, transitional economy

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INTRODUCTION

China is a transition economy that ranks as the second-largest economy in the world (The World Bank, 2020) and has strong aspirations to move up in the value chain and enhance its innovativeness. This push for improved innovativeness is additionally supported through a 'going out' policy that encourages Chinese firms to internationalize (Zhong, Zhu, & Zhang, 2015). Combined with a large consumer base with increasing buying power and demand for new products and services, the transforming economy of China provides a particularly fertile ground for firms to develop new business models as they prepare to compete on the global arena. Business model innovation is crucial for Chinese companies and entrepreneurs to not only capture and create value but also challenge incumbent firms that cope with the 'tired' old business model (Volberda, Mihalache, Fey, & Lewin, 2017; Volberda, Van Den Bosch, & Heij, 2017).

A prime example of business model innovation is ByteDance, a Chinese high-tech company that is rapidly entering overseas markets by launching apps like

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TikTok. TikTok is a social media app that people use to watch, share, and make short video clips. TikTok is an app developed primarily for the international market that is based on Douyin, which serves the Chinese market. Both TikTok and Douyin are products of ByteDance, a Chinese 75 billion USD start-up company that was recognized as the ‘most valuable startup company in the world’ in 2019 (Beat, 2019; Sender, 2019).

TikTok’s success is due largely to ByteDance’s effective business model innovation. First, TikTok combines successful business models in a creative way to develop a unique business proposition: it features elements of social networking and video-sharing platforms to deliver a new way to create value for consumers. Second, ByteDance used its domestic market as an experimentation lab, testing sections of the business model before implementing them abroad. ByteDance and TikTok show how organizations from transforming economies can create new business models through a combination of copying elements of successful business models and innovating new features that they rapidly test in their home market.

BYTEDANCE AND TIKTOK

TikTok is positioned as a live-streaming social networking service focusing on music sharing that allows users to perform short dances, lip-sync, comedy, and talent videos (Schwedel, 2018). Generally, the videos posted on TikTok are 15 seconds long and can go up to 60 seconds. TikTok users are primarily teenagers and young adults with 41% of users between 16 and 24 years old; overall, users spend 52 minutes on average per day on the app (Iqbal, 2020). Users can directly watch their favorite videos immediately after opening the app and scrolling down to another video in a time- and energy-saving way, unlike YouTube, which requires users to choose a video from many choices. TikTok and Douyin’s appeal is due to its providing a platform for young people to show themselves, fill fragment leisure time, and acquire information.

ByteDance launched the Chinese-market app Douyin in September 2016 and positioned it as a short music video community suitable for Chinese young people. TikTok was launched in 2017 and later combined with Muscial.ly, which was also a short video app that was acquired by ByteDance for around 1 billion USD in 2018. After the acquisition and combination, the users transferred from Muscial.ly to TikTok.

TikTok became one of the most popular apps in the world, according to data from Sensor Tower (Chapple, 2020). It was downloaded more than 738 million times in 2019 and the total number of downloads surpassed 1.9 billion in Google Play and the Apple Store. TikTok has been introduced in 155 countries and regions in 75 languages and the number of monthly active users is more than 800 million (Mohsin, 2020). Under pressure from TikTok’s fast growth, Facebook tried to compete by releasing a similar app called Lasso but failed.

KEY ELEMENTS OF TIKTOK'S BUSINESS

Combining Elements of Various Other Businesses – Innovation vs Imitation

TikTok provides an interesting value proposition as it combines various essential functions of other popular apps such as Instagram, Facebook, YouTube, Twitter, and Vine. While the various elements of TikTok might be traced to other apps, their combination is unique and its delivery is more user-friendly. TikTok enables users to watch and produce video clips, which is similar to YouTube. Compared with the square videos of YouTube, Instagram, and Snapchat, the tall videos of TikTok allow users to see videos directly in a full-screen mode. TikTok users only need to scroll down on their smartphone to play and shift between videos without having to choose what to watch next. The core ability of TikTok is the powerful algorithm that recommends content for users based on their prior choices such as likes, shares, or location. This total automation of video playback makes TikTok more user-friendly than YouTube or Instagram where users still have to choose the next video from an algorithm-recommended list. Furthermore, the scrolling video selection mode of TikTok is more suitable for one-hand or one-finger control than the tapping or swiping selection mode of other apps such as Instagram. Just like other video editing apps (e.g., Vine), TikTok users are allowed to film a video for a maximum of 60 seconds, which is shorter than YouTube but more appropriate for lip-syncing and other fun videos. TikTok provides many resources for users to make videos. For instance, there are many filter options to combine with a massive range of sounds from songs or clips from TV shows, online videos, or from other users. The numerous resources TikTok provides users to make videos lowers the risk and threshold of video creation. Users can join challenges, make jokes, or even record their daily life and post on TikTok without feeling too self-conscious as they might when posting on Instagram or Facebook.

But TikTok is not only a video app; it is also a social networking app. TikTok encourages normal users to follow and message each other, just like on other social software, as interactions among users strengthen the stickiness of the app. TikTok also contains key opinion leaders (KOL) or even 'online celebrities' cultivated by the company itself. In addition, Douyin, the twin app of TikTok, contains the same functions of TikTok but also combines the business models of Google and Amazon to empower and encourage users to search for information and shop online (Herrman, 2019).

Technological Assets – A Unique AI Algorithm

TikTok transfers the powerful AI-based algorithm system from Douyin to liberate users from numerous choices of videos and accurately feed them their favorite content. The AI-based algorithm of TikTok determines users' tailored information

distributions based on analyzing the content of each video and watching the preference of users to perform an endless and highly attractive video stream. More specifically, TikTok performs real-time traffic distribution based on the analysis of the users' hashtags, personas, and feedback data that include views, engagement (e.g., like, comment, share), and audience breakdown (e.g., market segmentation, ages, genders, devices). TikTok practices its philosophy by feeding everyone personalized, favorable content through consistently recommending similar content that can be shared, replicated, and built on. TikTok touted the algorithm as computer vision to extract and categorize visual information that relies on users' watching history and engagement patterns to serve users' interests. In short, TikTok controls your menu of entertainment by observing your reactions to each past video. Therefore, TikTok users don't need to think and search for the videos but are fed personal preference-based videos, which is a crucial part of TikTok.

The AI algorithm of TikTok and Douyin is generated from another of ByteDance's apps, Toutiao, which provides personalized feed news for each user by analyzing the content of news and users' preferences and interactions of content. TikTok users are able to form chain effects for a song or dance because of technology that can modularize complex forms of content to reduce the threshold for user participation and ensure the continuity of the contents' core nature. Then, the technology ensures the continuity of emotion embedded in the categorized content.

In the view of Yiming Zhang, the founder and CEO of ByteDance, the formula of internationalization is to present global products served with localized content. The central technology for TikTok is the AI algorithm, which provides the universal product that will determine video recommendations based on learning users' preferences and usages of the app, which is a unique advantage. But the most pivotal distinction is the content, which is the secret success of both apps. Foremost, it could cope with the different regulation and censorship systems of different countries for building a clean and healthy virtual environment (e.g., prohibit alcoholic, violent, and pornographic content). Moreover, market-focused content can attract local users and arouse their participation interests as users receive and get involved in updating local news and fun topics published by people who live in the same city or country. Also, TikTok recommends content based on local tastes. For example, Korean and Japanese users are more interested in cool dancers and cute girls, Indian users tend to prefer amazing acrobatics, and European users are likely to present fitness techniques and extreme sports. TikTok obtains higher stickiness and encourages enthusiasm for video creation by classifying users according to different markets. Furthermore, TikTok utilizes localized content to specifically attract local stars and online celebrities (e.g., Kinoshita Yukina in Japan), recruit local employees, and open advertisement auctions. TikTok encourages and incubates local people to produce localized content because the cultural influence is deeply rooted in local communities. For the same reason, local employees responsible for local operation and content review are recruited. Therefore, TikTok goes viral in the local market and

profits through advertisement auctions by integrating local content producers and local employees.

Organizing local theme challenges is another way to localize and stimulate interactions in local communities. TikTok local operators tailor suitable challenges for local users after examining the local culture rather than simply transfer content or specific theme challenges across different markets. For example, TikTok launches cultural-related challenges in different markets: the painting anime theme challenges were very popular in the Japanese market but motivational, educational, and health-related challenges are currently popular in India.

Value-Creation and Capturing Mechanisms

With revenues of about 176.9 million USD in 2019 (excluding non-iOS Chinese revenue) and 247.6 million all-time revenue, TikTok has not yet matured in terms of monetization as it still experiments with various models (BusinessofApps, 2020). Although not yet implemented, there is great potential for an online purchase function such as that which its sister app, Douyin, uses. A reason why it is not yet fully monetized might be that the majority of current users of TikTok are teenagers. Also, according to the explanation of Andrew Lipsman, the eMarketer principal analyst, social shopping isn't really taking off in America yet but is engrained in Asia (Weissman, 2019). However, there is great potential for an in-app purchase function since the young demographic of TikTok is not on Facebook and, thus, not accessible through Google toolkits. This makes TikTok a whole new channel for brands to access young people. Besides, the cross-border e-commerce sellers from emerging markets (e.g., AliExpress) currently are cooperating with TikTok to gain followers and attract purchases.

TikTok is experimenting with various other ways to gain revenues. Hollister, a brand from developed markets, is reportedly cooperating with TikTok to test adding a 'shop now' button which will transfer users into an online shop site inside the app (Alcantara & Sutton, 2019). In addition to direct online purchase as a means of monetization, ByteDance currently has the beta version of TikTok Ads as a specialized advertisement service provider to enable firms or brands to launch campaigns and promotions on TikTok. For example, Too Faced, a UK beauty brand favored by young people, obtained 1.3 million clicks to the product page and earned an 18.38% CTR that exceeds the UK market benchmark. In addition, firms are encouraged to launch hashtag challenges with other influencers to promote brand-related videos.

It seems the way for TikTok to win mature users and expand profit channels is to copy the achievement of Douyin, though they are different apps from the same company. Compared with TikTok, Douyin is able to provide value-added videos at a maximum of 5 minutes and allows the co-existence of user generated content (UGC) and multi-channel network (MCN) models for enriching the variety of

video content. Many professional short video production firms are now dedicated to generating interesting content for users by analyzing their performance in terms of dance, music, or even dressing. Specialized business teams are responsible for writing a dialogue script and preparing costumes and props, just like directing a mini movie. Users are able to acquire useful information from the app, for example, information about coronavirus and news from the local community. Furthermore, Douyin enables users to directly purchase products or services from the video or even live broadcast visiting stores in a city or hotel rooms. The huge internet traffic owned by Douyin can be monetized through selling advertisement opportunities, profit from the commission of online private interaction between key influencers with the fans, and live selling.

CONCLUSION

Through business model innovation, companies in transforming economies can successfully internationalize as ByteDance has done with the TikTok app. Creative combination of elements of indigenous business models with elements from successful global businesses allows organizations from transforming economies to create unique value. Organizations can leverage their domestic base to experiment with new business model features that can then be implemented in their internationalization efforts. That is, firms in transition economies are co-evolving with their changing national environment (Volberda et al., 2017). ByteDance used the domestic IT strengths supported by national policies to develop an algorithm that, as a non-location bound resource, is the foundation of its international success. Therefore, as ByteDance showed, transforming economies can provide a good arena for firms to develop innovation business models.

NOTES

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