


## Dialogue, Debate, and Discussion

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### Solving Paradox by Increasing Technological Capacity: A Critique of the Concept of Business Model Innovation at TikTok

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**ABSTRACT** This paper comments on Yulun Ma and Yue Hu's (2021) recent article 'Business Model Innovation and Experimentation in Transforming Economies: ByteDance and TikTok'. It argues that TikTok's international success is not due to so-called business model innovation; instead, it is because ByteDance has overcome three major hurdles facing emerging market firms pursuing internationalization. It also posits that the case of TikTok offers inspiration for theorizing paradox, namely, individuals and organizations can solve paradoxical tensions by increasing capacity through the use of advanced technologies.

**KEYWORDS** business model innovation, emerging market, internationalization, paradox, technology

**ACCEPTED BY** Deputy Editor Johann Peter Murmann

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### INTRODUCTION

In their article 'Business Model Innovation and Experimentation in Transforming Economies: ByteDance and TikTok', Ma and Hu (2021: 382) posit that 'Firms from transforming [emerging] economies can leverage the characteristics of their location to develop innovative business models before internationalizing'. They use the case of the Chinese IT company ByteDance and its video-sharing app TikTok to illustrate their idea. While I appreciate and commend their effort to explain the international success of TikTok, which launched in September 2017 and has become one of the most downloaded apps globally, I am not convinced by their argument that 'TikTok's success is due largely to ByteDance's effective business model innovation' (383).

## NOT BUSINESS MODEL INNOVATION

Undoubtedly, Ma and Hu (2021) made some important observations about TikTok's strategy and competitiveness, such as 'a combination of copying elements of successful business models and innovating new features that they rapidly test in their home market' (383), 'their combination is unique and its delivery is more user-friendly' (384), for example, unlike YouTube, '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' (383), and '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' (384). However, none of these can be categorized as business model innovation.

Although business model innovation may be defined in different ways, its essence has been described as 'the discovery of a fundamentally different business model in an existing business' (Markides, 2006: 20) whereas a business model is the logic of a business to create and capture economic value (Teece, 2010). In fact, many IT companies in emerging markets, such as China's Tencent that owns the mega-app WeChat, have already adopted the strategy of combining imitation and innovation; and therefore TikTok's so-called 'unique combination' and 'user-friendly delivery' is not business model innovation. Clearly, TikTok's powerful artificial intelligence (AI) algorithm, a 'technological asset' (Ma & Hu, 2021: 384), would be better categorized as technological innovation instead of business model innovation.

What's more, Ma and Hu (2021: 386) themselves acknowledge that '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'. This is to say that TikTok's business model, i.e., its logic of value creation and capture, has not been finalized and very effective; and therefore, there is no basis to talk about business model innovation with regards to TikTok.

## INTERNATIONALIZATION OF EMERGING MARKET FIRMS

If business model innovation is not relevant in this case, what is the insight of Ma and Hu's (2021) article? In my view, it is a point that they briefly touched upon but did not further develop, that is, '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' (385). When it comes to internationalization, emerging market firms face three major hurdles, namely, liability of foreignness (Zaheer, 1995), liability of origin (Ramachandran & Pant, 2010), and paradoxical tension between global integration and local responsiveness (Prahalad & Doz, 1987). An elaborate account of the international success of TikTok or an emerging market firm in general needs to answer how it has overcome these hurdles.

Zaheer (1995: 342–343) defines liability of foreignness (LOF) as ‘the costs of doing business abroad that result in a competitive disadvantage for an MNE subunit – have been broadly defined as all additional costs a firm operating in a market overseas incurs that a local firm would not incur’. According to Hymer (1976), as multinational enterprises (MNEs) face additional costs of doing business abroad compared with local competitors in their host countries due to their lack of familiarity with local environment, they need to have some competitive advantages over the local competitors if they are to succeed in host countries.

In the case of ByteDance, its powerful AI algorithm gives TikTok a competitive advantage that (over)compensates its liability of foreignness. As Ma and Hu (2021) rightly pointed out, ByteDance’s development of its AI algorithm has benefited from the Chinese government’s policies and supports for the AI industry. According to the *2021 AI Index* produced by the Stanford Institute for Human-Centered Artificial Intelligence, in terms of AI prowess, the United States and China have emerged as global leaders.<sup>[1]</sup> Therefore, ByteDance’s competitive advantage in AI algorithm can be seen as a mix of firm-specific and country-specific advantages (for the distinction, see Rugman, 1981).

Ramachandran and Pant (2010: 233) define liability of origin as ‘disadvantages faced by MNCs in international markets as a consequence of their national origins’. Emerging market MNEs are often burdened by their home countries’ backward images and reputations. For instance, emerging market MNEs are often seen as copycats instead of innovators (Luo, Sun, & Wang, 2011) and boycotted by Western consumers due to allegations of labor rights violations in their home countries. Two common strategies to cope with liability of origin are dual branding (Kotler, Armstrong, Saunders, Wong, 1996; Saunders & Fu, 1997) and localization.

ByteDance adopted a dual branding strategy in its internationalization. When ByteDance decided to internationalize its domestically popular video-sharing app Douyin (抖音), it did not use the same brand name but instead rebranded it as TikTok, which does not sound Chinese and is easy to pronounce by non-Chinese speakers. ByteDance also adopted a localization strategy. As Ma and Hu (2021: 385) point out, ‘TikTok utilizes localized content to specifically attract local stars and online celebrities’ and ‘encourages and incubates local people to produce localized content’. TikTok also recruited local employees responsible for local operation and content review.

The global integration vs. local responsiveness tension is a well-known paradox in international business and management (Prahalad & Doz, 1987). It is a challenge not only to emerging market firms but also advanced country firms. Managing a business across borders requires a delicate balance between the two contradictory yet complementary demands. While Bartlett and Ghoshal (1989) have proposed a transnational approach to this tension that emphasizes a managerial innovation, many MNEs across the globe still find it difficult to integrate or balance the two imperatives. In the case of TikTok, ByteDance

seems to have found a solution to this paradox that is not a managerial but a technological one.

As Ma and Hu (2021: 385) maintain, the foundation of TikTok's international success is its powerful AI algorithm that can analyze 'users' watching history and engagement patterns' to understand their interests and preferences, and accordingly 'fee[d] everyone personalized, favorable content through consistently recommending similar content that can be shared, replicated, and built on'. By using the AI algorithm as a technological asset, ByteDance succeeds in using a single mobile phone app that is centrally designed and maintained in China to satisfactorily serve the personalized needs of users from all over the world. In short, TikTok has succeeded in balancing global integration and local responsiveness demands. This well reflects 'the view of Yiming Zhang, the founder and CEO of ByteDance, [that] the formula of internationalization is to present global products served with localized content' (Ma & Hu 2021: 385).

### **SOLVING PARADOX BY INCREASING TECHNOLOGICAL CAPACITY**

If we go one step further, we could argue that the case of TikTok offers inspiration for theorizing paradox in general, namely, individuals and organizations can solve paradox by increasing their capacities through the use of advanced technologies.

It has been said that organizational life is full of paradoxes and any paradox may be nested within other paradoxes located at different levels of analysis and knotted with other paradoxes spread across different domains (Smith, Erez, Jarvenpaa, Lewis, & Tracey, 2017; Smith, Jarzabkowski, Lewis, & Langley, 2017). Such complexity seems to imply a web of paradoxical tensions to which human beings are chained. One may wonder whether humans are doomed when trying to respond to paradoxes. The mainstream paradox theory (Lewis, 2000; Smith & Lewis, 2011) seems to suggest such a dismal outlook as it asserts that paradox is inherent and irresolvable (Schad, Lewis, Raisch, & Smith, 2016).

Contrary to this mainstream perspective, I (Li, 2021a) have proposed that paradoxical tensions are not inherent but caused by the asymmetry between one's capacity and expectation (ACE), and the solution to paradoxical tension is to reduce the asymmetry by either reducing one's expectation or increasing one's capacity or doing both simultaneously. It has been demonstrated that reducing expectation can help resolve paradoxical tension (Li, 2021b). Here, the case of TikTok shows that companies can solve paradox by increasing their technological capacities. Advanced technologies, such as big data, blockchains, and artificial intelligence, to name but a few, have huge potentials for assisting companies to do complex tasks that would otherwise be impossible to imagine. They can help individuals and organizations to achieve more in a faster, better and cheaper way (多快好省), which is an irresolvable paradoxical tension in the eyes of an unassisted human being.

In a sense, business model innovation is concerned about solving some paradoxes. Different business models have their own merits and drawbacks, especially those in opposition such as brick-and-mortar retail vs. e-commerce, original equipment manufacturer (OEM) vs. original brand manufacturer (OBM), and mass production vs. customization. When the opposite business models prevail in the market, a business model innovation can take the form of integrating the opposite models, just like a synthesis between a thesis and an antithesis.

For example, Kutesmart (酷特智能, formerly, Red Collar, 红领), a Chinese clothing company founded in 1986, adopted an OEM business model in the 1990, but decided to shift to an OBM model in early 2000 with the anticipation of declining profitability of the OEM model. Weighing the merits and drawbacks of the mass production and personalized customization business models, the company embarked on a 13-year journey (2005–2013) of radically transforming itself from a traditional clothing factory into a smart manufacture, by utilizing advanced technologies such as Internet of Things and Big Data. The digital transformation helps the company to successfully solve the paradoxical tension between mass production and customization and therefore achieve both cost and differentiation advantages (Porter, 1980). Williamson (2010) earlier noted that Chinese companies, unlike their western counterparts, seem to be particularly good at achieving both advantages at the same time. In the case of Kutesmart, its digital system, powered by a massive database and advanced computing capacity, can automatically make a pattern for a customized suit design within just 5 minutes (Liu & Zhu, 2016). In comparison, a traditional clothing factory relies on skilled and highly-paid pattern-makers who normally can make patterns for no more than two different suits per day and they may sometimes make mistakes.

## CONCLUSION

In conclusion, in my view the examples of ByteDance and Kutesmat demonstrate that achieving both low cost and differentiation through increasing one's technological capacity is a sophisticated and sustainable strategy as well as a viable solution to paradox for both emerging market and advanced country firms. To frame TikTok as business model innovation distracts from what truly makes them successful.

## NOTES

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[1] Source: <https://hai.stanford.edu/news/ai-report-competition-grows-between-china-and-us> (accessed on August 22, 2021).

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