



The new face of
**business
model
innovation**



Are Chinese Internet companies eclipsing American inventiveness?

By George Hylden

Chinese business models are often described as western transplants that innovate or adapt to fit their local market, whereas western innovativeness is typically seen as being more inventive. But is this actually the case? A comparative analysis of pioneer Internet business models in the U.S. with those in China, as the follower market, reveals systematic differences in both the incidence and type of business model innovation. Adopting an inventive versus a copy-paste and adapt approach, for example, can have a strong impact on corporate performance.

Meanwhile, it is also worthwhile to ask whether the inventive approach has worked well in the home markets where it originated. Consider the disappointing financial performance of U.S. Internet pioneers Amazon, Yahoo, and Facebook. Not only have their overall business strategies been called into question, but their respective business models too have come under intense scrutiny from managers and investors alike. Long-term considerations such as strategies aimed at gaining market share, or short-term operational fixes like elaborate cost-cutting schemes, have so far yielded little in the way of desired financial profitability.

The well-documented success of Chinese Internet giants Alibaba, Baidu and Tencent, on the other hand, indicates that the performance of Internet business models can be exceedingly lucrative, far beyond what American narratives portray. In fact, Chinese companies have succeeded in what their U.S. counterparts have failed to achieve—systematically seizing upon business model innovation to turn value-added propositions into profitable businesses.

Resolving the performance paradox

Contrary to expectation, Internet companies in China, the follower market, exhibit both a higher incidence and a superior type of business model innovation that translates into superior performance as compared to their counterparts in the pioneer Internet market in the U.S., and the West in general, as an extension of that

market. It is forgivable to think that a first-mover advantage in a pioneer market would result in greater financial success, but a closer examination of the companies emerging in the follower market reveals the underlying logic behind successful business model innovation that is ‘Made in China’.

Empirical evidence suggests that the West largely relies on business model invention through technology leadership. China, in contrast, is predominantly characterised by business model innovation, which is achieved through integrated solutions platforms. This may imply that technology leadership and business model invention are secondary to business model innovation and integrated solutions when it comes to realising financial profitability.

To illustrate this point, I look at American and Chinese companies in three market segments: online sales platforms; online search engine and information service platforms; and online social media and communications platforms. In each segment, I compare and contrast the business models and performance in the pioneer and the follower market. The stories of China’s online giants—Alibaba, Baidu and Tencent—in their respective market segments show how each of these companies have used business model innovation in the follower market. Alibaba, for instance, is an example of *cementing* a first-mover advantage, with the leader fending off the challenger. The case of Baidu is an example of *inverting* a first-mover advantage with the challenger upstaging the leader, while that of Tencent illustrates *neutralising* a first-mover advantage with the leader and challenger, preserving the status quo by engineering a stalemate situation.

Online sales: Alibaba fends off the challenger

PIONEER MARKET: AMAZON, EBAY AND PAYPAL

Amazon.com, the direct online seller that was launched in 1995, eBay, the third-party online sales platform (1998) and PayPal, the online payment platform (1998), all emerged as dominant players in the U.S. online sales market. From the point of value creation and delivery, all three start-ups initially served their respective market segments and operated stand-alone business models. Amazon’s initial focus was on business-to-consumer (B2C) direct selling enabled by a vast supplier network and its own warehouses. In contrast, eBay focused on B2C and consumer-to-consumer (C2C) third-party transactions, with PayPal facilitating online sales transactions through its online payment system.

In terms of value appropriation, Amazon’s revenue model was built upon charging transaction fees to sellers, as well as fee-based advertising, and thus relied on a high turnover of stock. Its cost model though was built on managing working capital-intensive inventory as a variable cost, which relied on a high turnover of stock in addition to indefinite platform scalability as an initial fixed cost with subsequent near-zero marginal costs.

Over time, Amazon effectively sought to rebalance its revenue-cost-profit architecture away from B2C direct selling towards operating a third-party transaction platform. In addition to entrenching itself as the incumbent in the high volume, low profit B2C direct selling segment, it practised horizontal post-hoc integration and consolidation through the launch of Amazon Marketplace in an effort to rival eBay in the profitable C2C market segment. In time, Amazon Marketplace, a B2C and

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C2C third-party transaction platform, overtook Amazon's traditional direct-selling platform in both revenue and profitability. However, overall operating profits still did not come close to the lofty stock market valuations that were expected following its Initial Public Offering (IPO) in 1997.

By contrast, eBay's acquisition of the moderately profitable PayPal in 2002 constituted a step toward vertical post-hoc integration. But due to a lack of sustainable functional and operational integration, eBay eventually yielded to shareholder pressure and spun off PayPal in 2012, thereby effectively undoing previous post-hoc integration and consolidation.

Amazon seized the first-mover advantage to entrench itself in the less profitable B2C market segment, while eBay established itself as the incumbent in the more profitable C2C market

segment. Thus eBay fended off Amazon Marketplace, its closest challenger, by way of vertical post-hoc integration and consolidation through the acquisition of PayPal.

FOLLOWER MARKET: ALIBABA

The Alibaba Group emerged as the dominant player in the Chinese online sales platform market. In addition to its eponymous business-to-business (B2B) third-party transaction platform launched in 1999, Alibaba comprises Taobao, a C2C sales platform that launched in 2003, AliPay, an online payment transaction platform (2004), Tmall, a domestic B2C sales platform (2008), and AliExpress, an international B2C sales platform (2010).

From the point of view of value creation and value delivery, not only does the Alibaba Group's business model differ from Amazon's in that it engages in no capital-intensive direct selling, it is also much broader in focus, spanning B2B, B2C, and C2C activities both domestically and, to an increasing degree, internationally.

In terms of value appropriation, rather than charging sellers a transaction fee, Alibaba Group's revenue model focuses on cross-platform referrals with monetisation on the basis of fee-based advertising by sellers, and an incentive structure that has made it more independent of transaction volumes. Its cost model is based on non-capital intensive cost innovation that accommodates both volume and differentiation strategies, with indefinite cross-platform scalability as an initial fixed cost that benefits from subsequent near-zero marginal costs.

In time, Taobao's C2C third-party transaction platform overtook Alibaba's traditional B2B and B2C third-party transaction platforms in both revenue



and profitability, and established itself as the unchallenged leader of Chinese online sales platforms. This was very much in line with a shift in Alibaba's dominant business models from B2B and B2C to C2C third-party transactions.

Alibaba's horizontally and vertically integrated solutions, ranging from its B2B and B2C platforms to Taobao's C2C third-party platform, as well as novel revenue and cost models, yielded superior operating profitability. This was in addition to the capital gains realised at its IPO in 2014. Alibaba's internal business model innovation in the profitable third-party transaction market segment pre-empted competition such that potential challengers like JD.com and Amazon.cn were limited to the less profitable B2C direct selling market segment.

Like Amazon, Alibaba created and seized the window of opportunity to establish its first-mover advantage in the market. However, unlike Amazon, it has been able to entrench itself and cement its position as the incumbent in the more profitable B2B and B2C to C2C third-party transactions segment while deterring and fending off potential challengers. In doing so, Alibaba employed business model innovation so as to **cement** a first-mover advantage.

Online search engines: Baidu upstages the incumbent

PIONEER MARKET: GOOGLE AND YAHOO

Google launched its search engine in 1998, and followed up with a host of ancillary offerings, thereby upstaging Yahoo!. By 2005, Google had emerged as the dominant player in the U.S. online search engine market. While Yahoo! took advantage of the window of opportunity for a first-mover advantage that propelled it to the top of the online information service market segment, Google took advantage of the late-mover advantage that subsequently helped it to supplant Yahoo! as the leader.

From the point of view of value creation and value delivery, Google invested in the broad strategic development of its online search engine and information services platform. For instance, Google's in-house R&D department produced the web map service Google Maps, and its multilingual translation service Google Translate. These complemented its purchase of video sharing platform YouTube, and led to horizontally and vertically integrated solutions in the form of integrated user and content platforms respectively.

In terms of value appropriation, Google's pioneering revenue model relied on monetisation through personalised ads, allowing customisation on the basis of search engine usage

profiling. Its cost model relied on a search algorithm that was self-improving as a function of usage. The model carried the potential of realising even negative marginal costs through economies of scope and scale, rather than merely decreasing or near-zero marginal costs.

Google has since transformed itself into one of the two most valuable technology companies alongside Apple, and has repositioned itself by launching inventions and innovations such as Google Glass and Google self-driving cars, in an effort to integrate hardware and software solutions to leverage its online offerings.

However, there have been limitations in commercialising the online information service platforms in the pioneer market. For instance, Wikipedia, a not-for-profit online encyclopaedia that acts as a user-generated content provider platform, emerged as the dominant and unchallenged leader in the online encyclopaedia platform market.

FOLLOWER MARKET: BAIDU

Baidu Inc. emerged as the dominant player in the Chinese online search engine and information services platform market, with Sohu's Sogou.com a distant second. Other domestic online search engines such as Qihoo 360 hold a negligible market share along with niche search engine platforms such as Alibaba's Alicloud, and Tencent's Soso.com. Chinese operations of U.S.-based online search giants—Google China and China Yahoo!—although initially strong competitors, eventually exited the Chinese market.

From the perspective of value creation and value delivery, Baidu's business model was similar to Google's in that it redefined its market as a combined online search engine and information service platform market. In addition, it was also much broader in focus in that it linked vertically integrated solutions (user-generated content provider and distributor platforms) to horizontally integrated solutions (user access service platforms).

In terms of value appropriation, Baidu's revenue model relied on a combination of pay-for-placement (P4P) and pay-per-click advertising, which hedged risks in the company's revenue stream and provided an incentive structure for increasing site traffic at the same time. The cost model though, relied on the immense scalability of platform development as an initial fixed cost for subsequent near-zero marginal costs.

Baidu realised the potential for horizontally and vertically integrated solutions by initiating the shift from searching third-party encyclopaedic content only, to using its search engine to power searches of its own commercial online

encyclopaedia. At the same time, it capitalised on the exclusive right to access, distribute and commercially exploit third-party content. Baidu's Baike thus became the largest Chinese online encyclopaedia by all monetisation-relevant measures: end-user count, page views and web traffic, after having upstaged Hudong's Baike, which remained the largest Chinese online encyclopaedia by article count.

Like Google, Baidu emerged as the market leader by pursuing business model innovation that merged the search engine market segment with the online information services market segment. However, Baidu succeeded in what Google failed to do: By upstaging the incumbent and acceding to the market leadership in the online encyclopaedia market segment, it turned the not-for-profit online encyclopaedia market segment, which relied on voluntary funding, into a for-profit model. In doing so, Baidu employed business model innovation so as to invert a first-mover advantage.

Online social media and communications: Tencent preserves the status quo

PIONEER MARKET: FACEBOOK, TWITTER AND WHATSAPP

Facebook, launched in 2004, Twitter (2006) and WhatsApp (2010) all emerged as dominant players in the U.S. online social media and communications platform market. From the point of view of value creation and value delivery, the firms operated stand-alone business models, and thereby created new market segments within the overall online entertainment and communications platforms market on the basis of proprietary platforms. This, however, led to fragmented market segments—Facebook's social networking platform, Twitter's social networking and microblogging communications platform, and WhatsApp's instant messaging services platform for smartphones.

From the perspective of value appropriation, subtle differences in the revenue-cost-profit architecture account for the relative performance differential of these companies—all three act as platform providers for third-party social network and communication and, as such, only provide the software infrastructure for user-generated publicly accessible content or user-generated private communication.

Facebook's business model focused on a third-party advertisement-driven revenue model with freemium services, while its cost model benefitted from the vast scalability of social networking and perpetual user-generated content. Twitter's business model operated on the basis of third-party advertisement-driven retweeting (i.e. promoting commercial tweets), while its cost model relied on the one-off nature of software and infrastructure investment, and perpetual user-generated publicly accessible communication. WhatsApp relied on a subscription-based revenue model by virtue of acting as a substitute for chargeable mobile messaging services, with a cost model similar to that of Twitter.

While Facebook realised substantial capital gains prior to its IPO in 2012 (in addition to relatively modest operating profit mainly through third-party monetisation), Twitter remained largely unprofitable, with only WhatsApp exhibiting superior profitability through direct monetisation. Facebook's subsequent takeover of WhatsApp in a landmark cash and stock deal in 2014 then constituted an instance of post-hoc consolidation, with an aim to reap the benefits of horizontal and/or vertical integration required for an integrated solutions platform.

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FOLLOWER MARKET: TENCENT, RENREN AND SINA WEIBO

Tencent Holdings—comprising QQ, its social networking platform that was launched in 1999 as OICQ; Tencent Weibo, its online micro-blogging platform (2010) and WeChat, its online instant messaging platform for smartphones (2011)—emerged as the dominant player in a delicately balanced stalemate, with Sina Corp as a close second, in the Chinese online social media and communications platform market.

Tencent succeeded in becoming the market leader by developing its powerful QQ web portal, a web community and instant messaging service, and transforming it into an online social networking platform. Its judicious use of horizontally integrated solution platforms helped Tencent to successfully overcome the modest first-mover advantage of RenRen in the social networking platform segment and, more importantly, offset the substantial first-mover advantage of Sina Weibo in the micro-blogging platform market segment.

From the perspective of value creation and value delivery, Tencent redefined the Chinese online social media communications platform market by gaining a foothold in all three market segments—online social networks, micro-blogging and instant messaging for smartphones. In addition, the company anticipated, well ahead of time, that these market segments would all merge into one. So through cross-referrals and compatible user interfaces, it successfully leveraged the network effect across its platforms and user devices.

In terms of value appropriation, Tencent's revenue model converged around advertising and freemium services, while the cost model benefitted from standardised software infrastructure

synergies across platforms and user-generated content, as well as infinite scalability at near-zero marginal costs.

Like Facebook, Tencent sought to gain a foothold in the social networking, micro-blogging and mobile instant messaging services market segments. However, unlike Facebook, it seized upon momentum dynamics to merge the market segments, thereby creating options for the future, preserving the status quo and engineering a delicately balanced stalemate situation. In doing so, Tencent employed business model innovation to neutralise a first-mover advantage.

Made in China does differ

The examples I mention above illustrate that the Made in China business model innovation has features that systematically differ from those of business model innovation in the West. The Made in America business model innovation, as the pioneer market, is characterised by forward innovation and backward integration. While forward innovation creates stand-alone quasi-monopolies and stifles competition, backward integration focuses on ex-post consolidation aimed at exploiting economies of scale and scope at the expense of integrated solutions. This results in a lower incidence and inferior type of business model innovation, which, in combination with an excessive focus on IPO valuations and subsequent capital gains, yields inferior performance.

In contrast, the Made in China business model innovation, as the follower market, is characterised by forward integration and backward innovation. While forward integration proceeds on a level playing field where firms compete on the basis of ex-ante integrated solutions, backward innovation proceeds on the basis of

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organic development of more advanced integrated solutions, This results in a higher incidence and superior type of business model innovation (refer to Figure 1), which, in combination with a focus on operating profits and capital gains, yields a superior performance.

The irony of my findings lies in the fact that the two business model innovations—Made in America and Made in China—are reverse sides of the same coin in many respects. While the Made in America technological innovation is superior to that in the follower market, the Made in China model exhibits a higher incidence and superior performance of business model innovation.

Future implications

There are significant implications for both business practitioners and policy-makers around the world. The Made in China business model innovation is incremental in that it does not rely heavily on radical technological innovation and business model invention, but on integrated solution platforms through novel combinations of readily available existing technologies and business models.

The distinctive nature of the Made in China business model innovation offers unique opportunities and challenges to business practitioners and policy-makers in Asia. First, the relative lack of legacy technology, and corporate and market structures in Asia allows for integrated solution-focused value propositions, while the absolute size of the Asian market allows for the easy scalability of integrated solutions platforms to be readily exploited. Second, Asia's gradual arrival at the technology frontier

necessitates a switch to simultaneous forward integration and forward innovation which is reflected in Chinese Internet companies advancing their R&D pioneering efforts, for example, in Alibaba's growing patent portfolio since its IPO in September 2014.

As other Asian nations, along with emerging markets in Latin America and Africa, look to learn from business model innovations of global leaders, they will be faced with two distinct approaches from China and the United States. Which one will they follow? Or will the next generation of followers supersede today's leaders in both innovation and performance?

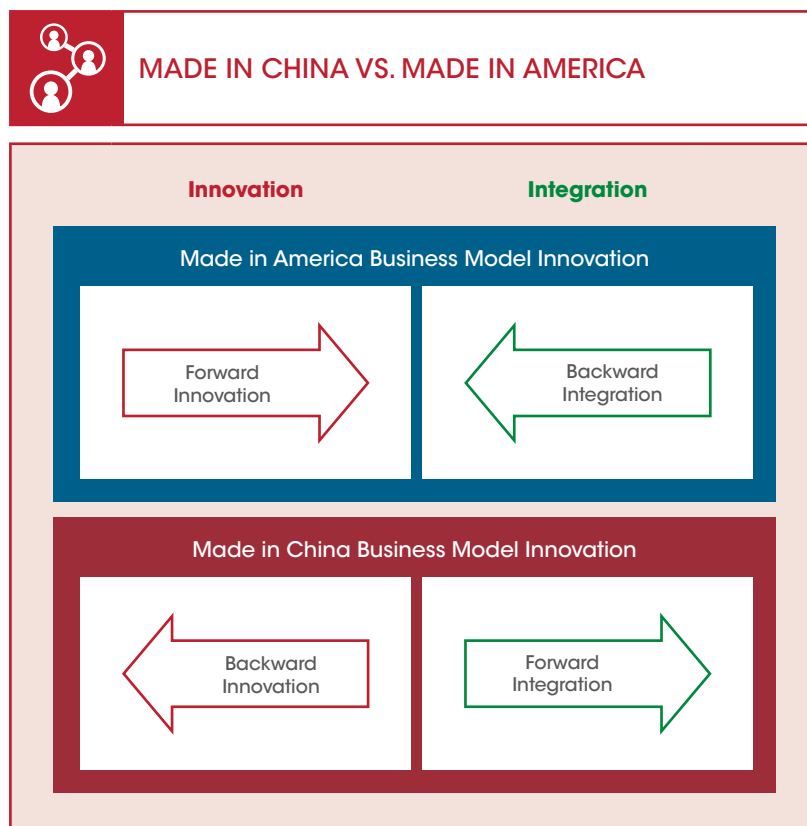


FIGURE 1

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