

How technology and finance can get along

ANDY YEE

The potential for digital technologies to disrupt entire industries appears to be limitless. We all live in the shadow of mechanisms such as Joseph Schumpeter's creative destruction and Charles Darwin's natural selection. A whole new league of online competitors has upended industries including journalism, music and movies.

Now technology is setting its sights on finance. This seems quite natural, as financial institutions are essentially information intermediaries. The virtual currency bitcoin marks a transition from the "Internet of knowledge" to an "Internet of value" that could someday replace financial intermediaries. Online payment mechanisms such as PayPal and Alipay as well as peer-to-peer lending platforms such as China's CreditEase are also capturing increasing segments of the financial value chain.

There is no doubt the antiquated infrastructure of finance is ripe for digital transformation. Free of the structural legacies of banks, Internet companies are poised to facilitate an explosion of financial innovation.

In emerging markets, large groups of under-banked consumers will drive demand for new financial technologies. Banks feel threatened. As Jamie Dimon, chief executive of JPMorgan Chase, put it, "When I go to Silicon Valley ... they all want to eat our lunch."

The big question is, will the interplay follow a process of Darwinian selection or one of mutualistic symbiosis?

The answer lies in the broader regulatory framework and market realities that will crucially shape future competition and collaboration. As anti-Darwinian creationists say, "intelligent design" will play a part.

The logic of symbiosis

Banking is one of the world's most tightly regulated industries. Over the past decade, regulatory scrutiny has heightened, with governments increasing their focus on combating terrorism, money laundering and drug enforcement.

As more complex financial products and bespoke advisory services are introduced, more cost is incurred to comply with regulatory standards. While a "regulatory gap" exists between established financial institutions and technology companies, regulators will catch up as the latter group starts to play a bigger role in finance.

Even for simple financial services, there are strong incentives for disrupters to ride on and improve upon the system. Beyond technological capabilities, it takes time and expertise for a financial network to build up credibility and universal acceptance. In payment networks, for instance, this requires balancing competing incentives for operators, merchants and customers, and the development of security and consumer protection measures.

There is therefore strong logic for Internet companies to partner with financial institutions. Indeed, the evidence so far points

REGULATORY AUTHORITIES WILL NEED TO WORK TOGETHER IN NEW WAYS AS CROSS-INDUSTRY BOUNDARIES BLUR

firmly toward a future of mutualistic symbiosis. Apple Pay, the iPhone's digital wallet service, does not attempt to disrupt the existing payment ecosystem but rather works with incumbents.

China's Alibaba Group Holding is the most visible example of an Internet company venturing into finance, having moved into small and medium enterprise lending in 2010.

Yet for all of this success, partnerships with banks remain important. Above all, the regulatory context is critical. For its online banking venture MyBank, Alibaba is looking to cooperate with traditional banks to work around regulatory issues.

Making partnerships work

Looking ahead, we should expect more partnerships between finance and technology companies. The more technological capabilities that banks can access and the more financial expertise that Internet companies can tap into, the better it will be for both parties.

The challenges of getting this right are considerable. First, there are significant differences in heritage between the two industries. While the Internet is open and inclusive, finance can be insulated and conservative. Second, it is not always easy to define the boundaries of a partnership and the respective roles of the partners.

Then there is the issue of regulation. In a highly regulated sector like finance, it may not be possible to re-create the Internet's permissionless innovation environment.

In this light, a shift away from the traditional prudential regulatory approach and the creation of a level playing field for banks and nonbanks will be critical to developing relationships. As more cross-industry partnerships are formed, regulatory authorities will need to work together in new ways as the boundaries blur.

The consequences of getting partnerships right are broad, given how central the finance industry is to the economy. For emerging economies in particular, the potential of using technology to achieve developmental goals like financial inclusion, better small company financing and increased trade flows is also significant.

Given an open and innovative mindset on the part of both banks and nonbanks and a conducive regulatory framework that enables healthy partnerships to come into existence, technology will eventually modernize the infrastructure of banking.



Andy Yee is a public policy analyst in Hong Kong. He is a former investment banker.