

**WHY BANKS
ARE FAILING
the
INNOVATION TEST
AND HOW THEY COULD DO BETTER**

Evidence From a Study of 65 Financial Institutions

THE DISRUPTION HOUSE

Summary

The future depends on innovation. How well are banks doing? We studied over 150 financial institutions, focusing on their commercial and wholesale arms, along with a few retail financial services companies and technology firms that now provide financial services. We focused in on 65 for detailed study and interviewed 20 in order to uncover information about their innovation capability. The work draws on five years worth of data on innovative firms globally as a point of comparison.

Some of the key findings are:

1. **Innovation capability.** Banks, particularly systemically important banks, have a low innovation capability when compared with companies overall (lagging by 10-15% in a comparison with a generic all companies index), but, more importantly, the top 10 global systemically important banks (G-SIBs) lag the index of all companies as measured by key capability indicators by 23% and lag other banks by 10%.
2. **Improvements in 2015.** Banks have improved their innovation capabilities over the course of 2015 though arguably not significantly so. In particular BNPP and Barclays have risen in the rankings and now make an appearance in the top 25. CitiGroup move into the top 10 at number 8 (up from 11 in our 2014 review), just above BBVA. Those dropping out of the top 25 include Banco Santander and Société Générale, while RBS has made an entrance into the top 50.
3. **Strategy.** Banks have a strong strategic position. The average score for strategic innovation capability for a bank was 20.6, marginally above that of a combined group (at 20.4) that included banks and new entrants such as Alibaba and Tencent of China. This score implies that the capacity for banks to make strong strategic moves in the market is high but is not being deployed. The main reason for this is leadership.
4. **Leadership problems.** Banks specifically lag the innovation index of all companies on leadership, based on our 2014 survey of innovative companies,¹ The gap in leadership capability between the most capable and 10th most capable G-SIB is over 75%, with leadership being particularly weak on the key issues surrounding adaptability and software-centric decisions.
5. **Too much orientation towards product innovation.** While banks appear to be working hard to develop innovation capabilities these are still targeted at product innovation more than process innovation, and are biased towards blue sky projects in blockchain (which has at least a 10 year development horizon but which every major bank now has an involvement in) and fintech startups that are going to be difficult to integrate into bank process innovation. These two focal points are not likely to help ROE in the short term.
6. **Process model innovation.** At present banks, in general, are not deploying the tools that would help them organise, structure and accelerate change nor drawing on their long experience in platforms. Many are suffering from gaps in intergenerational leadership dialogue, IT-business dialogue and a lack of coherence between strategy and innovation initiatives. These are all process issues calling for process model innovation.
7. **The narrative of change and thought leadership.** We found that leaders within banks have been extremely slow to develop a vision of what the banking industry might look like in ten or twenty years hence. There is little real thought leadership - leadership in the sense of the vision of the future and a narrative to support people on the journey to a new industry.

¹ Published as The Bluefin Solutions Elastic Innovation Index, January 2014

The study concludes that the way forward for banks is:

- a. **Inter-generational leadership.** Interviews revealed an awareness of innovation needs at the operational level but that these initiatives are distant from executive champions. The lack of true thought leadership on the future of banking is striking. To develop new operating models there is an urgent need for banks to host an inter-generational dialogue at the leadership level. The changes they need to make, require continuity over a 10 year period, younger generation executives are closer to the coal face and perhaps quicker to grasp what changes need to be made, and will inherit the challenges of change, so require experience through participation in new process model decisions.
- b. **Business platforms.** Banks need to develop a deeper understanding of new enterprise operating models, particularly technology-enabled business platforms, that are underpinning growth and adaptability in emerging markets.
- c. **BiModal process models.** These will be easier to construct if the banks reconsider large scale investment programs in favour of cheaper BiModal IT where they adapt internal processes to create a platform approach to business.
- d. **Engagement.** To improve process model knowledge and innovation capability at the operational level banks need to truly engage employees in the challenge of adapting to improved processes. That process model learning needs to be incentivised. In particular, IT departments need to be incentivised differently in order that they participate in the revenues from new business platform deployment.

“ *The capacity for banks to make strong strategic moves in the market is high but is not being deployed.* ”

- e. **Adaptive methods.** Banks have begun to embark on fail fast, fail cheap innovation methods and a more open form of innovation but too often this is divorced from executive decision making, with the result that they create sandboxes that are not driven by strategic needs. These are also product-centric innovations when the real need is for process mode innovation.
- f. **Real options planning.** Banks would benefit from real options planning and decision-making that give them a stronger grasp of the second and third order consequences of change. By maintaining a conventional ROI planning process banks are missing the link between innovation capability and the development of an adaptive organisation.
- g. **Creating the narrative of change.** Banks ought to take advantage of examples elsewhere in building a narrative of change.

The Context of Financial Services Innovation

Which banks or more broadly, which financial institutions, have the highest innovation capability? That question is probably one of the most important to ask for the future of the western economy.

In attempting to understand a bank's ability to change it is important to ask what the direction of change needs to be.

Financial institutions in Asia are typically emerging from the world of e-commerce or the web, which means that they have a close relationship with the real economy. They provide the platforms of exchange or communications (Alibaba, JD.com, TenCent), they fund merchants, manufacturers and buyers, they provide logistics services, and they attempt to integrate services (taxi rides with theatre bookings for example).

By creating high levels of integration they are redefining the *modus operandi* of commercial banks. They are also active in creating new channels for funds' origination (at present in wealth management but with a view also to funding corporate finance) that will, over time, create an alternative capital market. They are rewarding investors more and eschewing complex derivative products as a means to get business done.

“ Banks are fixated with the idea of digitisation without understanding the new role of business platforms

This is the backdrop for financial innovation. For a more detailed account see our report *The Platform for Disruption: How China's Fintechs Will Change How the World Thinks About Banking*.²

Against this background western banks believe their biggest problem is cost reduction and/or startup disruption. They have yet to understand the imperatives of business process change and are fixated with the idea of digitisation without understanding the new role of business platforms. As a result, they are creating problems for themselves by believing that “digital” is somehow a solution-set.

These conclusions come from our study of 150 financial institutions with in-depth analysis of the innovation capabilities of 65 from around the world including Asia, the US, Japan, Latin America, Europe and Africa. The study scores banks on innovation capability or Key Capability Indicators (KCIs) developed in a series of cross-sector innovation studies undertaken by the Disruption House.

It is not just that banks score lower than the average company on KCIs, the difficulties they face are profound. The hangover from the crisis continues and it is compounded by changes in the global economy.

On top of the changes we see emanating from China, global economic change is creating new money flows, switching the balance of global trade away from North-South to South-South, with China tech platforms well positioned to benefit from this growth. The following elements are going to be problematic to western banks and need to be taken into account when developing strategy.

1. Competitors entering the transaction banking space are building business around integrated platforms, ie multi-purpose platforms that can deliver working capital, merchant financing, manufacturing financing, escrow, and delivery, based on quick decisions. The new competition has this multifaceted capability and it will

² Published by SWIFT, Singapore October 2015

grow as companies like Alibaba, SAP Financial Service Network, Tencent and similar companies grow their financial capabilities.

2. In addition, western companies are being outcompeted by domestic rivals in emerging markets. This is true in Brazil, China and India, particularly where business has a digital element. The same is true though in physical goods - Unilever and Nestle are laggards in the China ice cream market, P&G lags local detergent brands. Western companies lack access to fully financed distribution networks and the extensive risk management data they rely on in Europe and the USA. It is going to be easier for western companies to trade on China tech platforms, rely on tech platform logistics, and take financial products as part of the platform data cycle.
3. The requirement to expand into these markets is taking place at a time when simultaneously western banks are pulling back to protect their balance sheets.
4. Responding to disruption requires banks to offer a competitive service on business platforms. These may not end up looking like Alibaba or SAP Financial Services Network but they will have to broach the problem of service integration. Thinking and acting this way requires business process change that many banks are not addressing because they are too focused on Fintech, blockchain and similar greenfield opportunities.

Background to the Index

The Index measures 38 different indices of management and executive capability. The capabilities have been sanity checked through taking our original top 50 and looking at the stock price performance of these companies over a three year period. Companies that score high on our criteria outperform all stock indices we have examined.

The criteria include such capabilities as:

- The development of social communications capabilities as measured by the degree of activity on social platforms, internally and externally and the public acknowledgement of this as a strategic capability
- The development of a platform approach to business and the capabilities that go with this:
 - Willingness to engage with or develop external facing open APIs
 - Success of API programs
 - Capacity for ecosystem development
 - Degree of IT/business interaction and presence of IT/business forums
 - IT architecture innovation
 - Capacity for continuous delivery in IT
 - Moves to integrate with global digital platforms
- Degree of openness
 - The externalisation of innovation to third parties
 - The use of participatory mechanisms
 - Extent of risk delegation to third parties
 - Iterative product development
- The development of acknowledged thought leadership in the executive team
 - This also includes the degree to which the company is trending towards a modern content strategy
 - Development of product optionality strategies
 - Evidence of a compelling change narrative
- Extent of customer interaction whether continuous through data analytics or participatory forums, communities
- Treasury/CFO innovation to sustain and extend global distribution networks
 - also including innovations in platform-based distribution, or electronic billing and receivables

Findings - The World's Most Innovative Financial Institutions by Capability

According to research from The Disruption House, the list of financial institutions with the highest innovation capability is headed by a non-bank - Alibaba, the Chinese e-commerce platform that recently acquired a banking license. It already had a payments platform (Alipay) and has pioneered wealth management distribution from micro-investments, moved into small business loans and is currently developing a global logistics platform for 3 day delivery of goods anywhere.

To arrive at its conclusions The Disruption House measures innovation capability, or input, what goes into innovation processes, rather than output. Alibaba scores highly on 38 criteria The Disruption House uses to judge whether an organisation is capable of adapting to new economic conditions, in effect whether it is adaptive or is sitting around waiting to be disrupted.

In our index (The Financial Services Innovation Index) Alibaba scores 87.3/100 for innovation capability. The nearest competitor is Australia's Westpac at 80.15 followed by the Bank of New York Mellon on 79.3.

The top 10 financial institutions by innovation capability in fact consist of three technology companies who are not really banks - Alibaba, TenCent and the new infrastructure platform Ripple. Card company American Express comes in at equal number 4 alongside Ripple and TenCent on 77.8 . Only CitiGroup, BBVA and BNY Mellon from the list of global systemically important banks, defined by the FSB, make the top 10.

“ *The top 10 financial institutions by innovation capability in fact consist of three technology companies who are not really banks* ”

The research suggests that banks have improved their innovation capabilities over the course of 2015 but not significantly so. However, there are movers and shakers. In particular BNPP and Barclays now make an appearance in the top 25, and CitiGroup move into the top 10 at number 8 (up from 11 in our 2014 review), just above BBVA. Those dropping out of the top 25 include Banco Santander and Société Générale.

Table 1. Top 10 Most Innovative Financial Institution by Innovation Capability (or KCI).

POSITION	SCORE	COMPANY
1	87.30	Alibaba/Alipay
2	80.16	Westpac Banking Corporation
3	79.37	Bank of New York Mellon
4	77.78	American Express
5	77.78	Ripple
6	77.78	TenCent
7	76.98	Fidor Bank
8	76.19	Citigroup Inc.
9	72.22	BBVA
10	71.42	Fidelity

Specific Capabilities

Over the past three years we have been studying the characteristics of companies that have high innovation capability. We distinguish between capability and execution. Execution is usually measured by results and while results - like new products, and patents - are useful for understanding the present, they are not necessarily a valuable indicator for the future. If you can measure capability then you have a chance of anticipating which firms are going to do well in future as distinct from those that are performing well now.

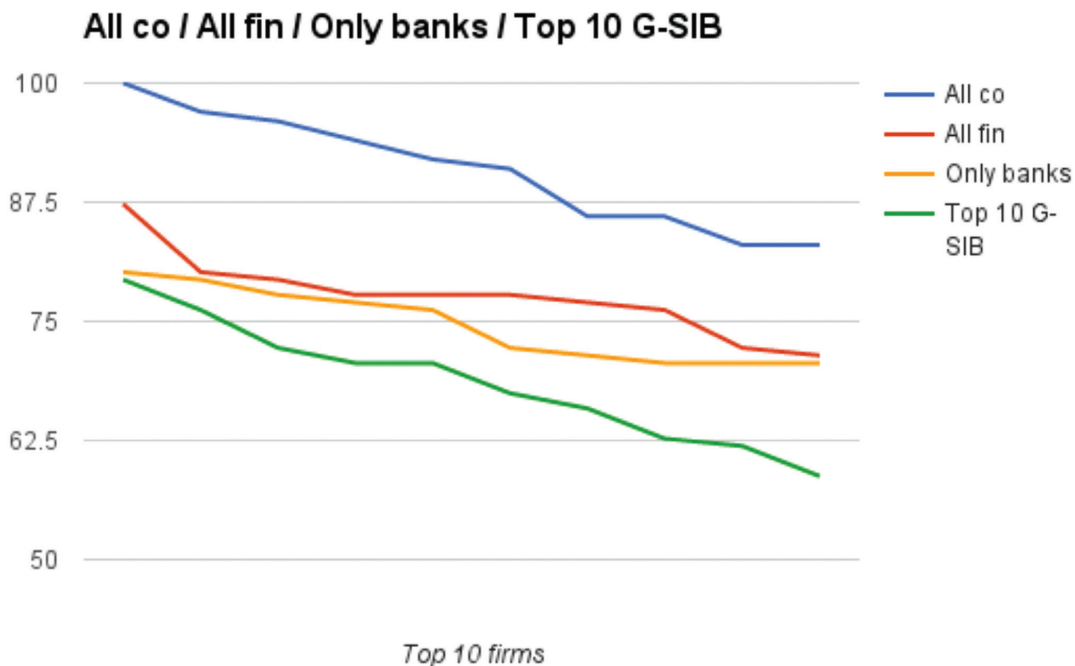
This matters because companies like Kodak and Nokia, both of which had to exit businesses they dominated, were both profitable when they were most in trouble. Profitability and stock price are not necessarily a good guide to what is going to happen next.

In the case of all banks and particularly systemically important banks we need metrics that point to an ability to change and to be adaptive.

The Disruption House has developed these metrics over the past three years beginning with a study of 5,000 companies across 8 stock markets. In the initial study the top 100 companies by innovation capability were identified and then backward matched to stock price performance as well as forward matched 18 months past the study date.

The criteria developed in the first study were developed and then applied to banking. When compared to non-financial firms' innovation capability banks lag significantly:

Table 2. Comparison of Key Capability Indicators Top 10 All Companies, Top 10 Financial Companies, Top 10 banks and Top 10 Systemically Important Banks.

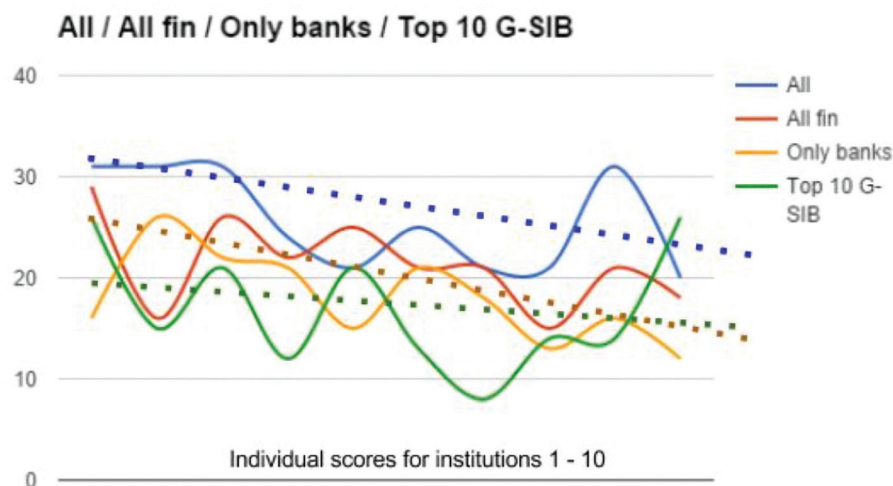


The table above shows that innovation capability falls away significantly between all types of companies.

Taking the blue line (the top 10 from our initial study of 100 companies across all sectors)³ the gap between the most capable and the 10th most capable is already over 10%. The gap between “All companies” and all financial companies (including tech companies) is 10%, the gap between all financial companies and systemically important banks is 23% and the gap between the most capable company and the 10th most capable systemically important bank is over 40%.

The most surprising results come in leadership qualities for innovation capability. The gap in leadership capability between the most capable financial institutions and the least capable global systemically important banks is a massive 70+%. There are serious deficits in innovation capability at many leading banks but the leadership capability is the one that most urgently needs addressing.

Table 3: Leadership Capability Indicators of Top 10 Companies, Top 10 Financial Companies, Top 10 Banks and Top 10 Systemically Important Banks



The criteria we use to assess innovation capability very much draw on earlier work on modern business platforms and ecosystems. That is to say we designed the criteria to reflect the qualities of successful companies, which increasingly take a utility position in the market, enabling value creation by others. Alibaba’s use of its e-commerce platforms and escrow service Alipay would be one such example.

In this changing enterprise context we find that:

- 1. Capabilities.** Banks typically have underdeveloped innovation capabilities, scoring on average around 10% lower than other sectors, and dropping rapidly in capability beyond the top 10.
- 2. Leadership for change.** The best banks by innovation capability are as good as strong technology companies on the same metric. There are just too few such banks. The biggest area of lag for banks is in leadership with the 10th most capable bank on this metric 50% down on the most capable company across all sectors. Leaders do not grasp the modern economy and the need to take a lead on technology-driven innovation and to communicate a narrative that spells out the future of banking.

³ See Haydn Shaughnessy The Bluefin Solutions Elastic Innovation Index, London Jan 2014

- 3. Real client interaction.** Banks appear to have processes in place to capture customer needs automatically and to translate these into service development. However, it is not clear that these facilities are well used. A lack of customer engagement is responsible for a poor understanding of customers' changing needs. Although 28 out of the top 50 banks appear to be making some use of automated feedback loops there appears to be a lack of process for incorporating that into product and service development.
- 4. Platforms.** Banks have a strong background in platform technology that they are not adapting to modern needs. The biggest challenge is learning how to move to a business platform model of operations, rather than focus on tech platforms. The business platform, as distinct from a pure technology platform, requires a vision for a new scale of operations, off-balance sheet facilitation of third party business partners, a borderless remit, and integrated services. This vision is difficult for banks to grasp because their IT departments tend to major on infrastructure concerns and have been slow to move to BiModal IT processes. Yet on the platform parameter the best banks scored as highly as the tech-banks.
- 5. Decision making.** A serious challenge for financial institutions is to bridge their executive decision making and innovation or disruption planning - this problem is not unique to banks and can be found across sectors; however banks particularly suffer from a leadership - innovation gap more profound than other sectors.
- 6. Systemic Banks.** Of particular concern to policy makers, the group with the lowest innovation capability is that containing the Global Systemically Important Banks. On the Index there is a 40 point gap between the most innovative company and the 10th most innovation G-SIB.
- 7. Externalising functions.** Banks tend to have widely dispersed ownership of a wide range of companies but they do not externalise core processes very willingly. Now that they are under pressure to manage their balance sheets differently this has to change. However, they have little experience of being good partners. Their "externalisation score" equalled on average only 10 out of a possible 19 with the top ten (which includes tech firms) averaging 16.
- 8. BiModal IT.** A major issue is that banks prioritise major core platform investments running into hundreds of millions of dollars, with a high risk of project failure, and eschew answers that can provide short term benefits at a sub-\$1 million cost. They are captive to vendors rather than looking for ways to be nimble and to create adaptive processes for fast changing economies. Yet, at their best, the platform capabilities of financial institutions such as Fidelity are the equal of tech competitors.
- 9. Technology management.** Despite spending heavily on IT banks do not develop and protect intellectual property. The level of patenting activity was extremely low with only the tech-based finance companies regularly exceeding 25 patents a year and the majority of banks filing none.
- 10. Capabilities.** Finally we believe banks are not aggressive enough at acquiring new competencies, preferring instead to retreat to their "core" and rely on the new external innovation infrastructure of technology scouting, Silicon Valley outposts and Fintech investments.

The Top 25 Financial Institutions by Innovation Capability

POSITION	INSTITUTION
1	Alibaba/Alipay
2	Westpac Banking Corporation
3	Bank of New York Mellon
4	American Express
5	Ripple
6	Ten cent
7	Fidor Bank
8	Citigroup Inc.
9	BBVA
10	Fidelity
11	Capital One
12	DBS (Singapore)
13	Barclays
14	Bank of America
15	La Caixa
16	JP Morgan
17	mBank
18	Nedbank
19	Rabobank (Netherlands)
20	Silicon Valley Bank
21	US Bank
22	USAA
23	Commonwealth Bank of Australia
24	HSBC
25	BNPP

Background to the Methodology

The assessment of bank innovation capabilities builds on research over the past five years on identifying the transformational capabilities of firms and which culminated in the Elastic Innovation Index, a listing of the global top 50 companies ranked by innovation capability.

This study started with an initial review of 150 banks and financial institutions, which were reduced to 65 for deeper analysis of which 20 were interviewed for deeper analysis.

Our research has given us:

- a. A set of 38 criteria for assessing the innovation capabilities of the top performing companies
- b. An assessment of stock market performance of those companies over 3 years to validate the relationship between the selection criteria and stock price performance.

The Elastic Innovation Index, when tested for stock market performance over three years compared with a variety of indices as per the table below outperformed them, demonstrating the impact the capabilities have when successfully implemented.

Comparative Performance of the Elastic Innovation Index Over 3 Years

	JAN 2012	DEC 2014	3 YEAR CAGR
Schwab 1000	11612	18461	16.71
NASDAQ Composite	2790	4736	19.29
KBW/NASDAQ Bank Index	39.79	74.73	23.38
S&P 500	1258	2087	18.38
Elastic Innovation Index	251.46	483.03	24.31