How Effective Collaboration between Banks and Fintech Firms Drives Innovation

In Summary:

People experience the benefits of evolving technologies on a daily basis in various spheres of their lives. They therefore demand the same from their banks. Alternative financial services providers are responding to this demand by disrupting the industry.

It is predominantly through technology that banks will enhance their operational flexibility, optimise business processes and generally keep pace with innovation and social phenomena. The consequences to banks refusing to innovate could be as severe as was experienced by stagnant media companies. Agile market entrants reinvented business models, leaving their competitors without their previously relied upon sources of revenue.

Globally, many banks are embracing the innovation challenge in different ways. Some become the venture capitalists for start-ups who could become their innovation provider. Others set up inhouse innovation labs, encourage employee innovation or join global accelerator programmes. The most recent trend is for banks and innovators to find each other in innovation eco-systems or networks, often facilitated by third parties. Most banks however, follow a multi-pronged approach.

This paper argues that banks need to include working with smaller fintech firms in their innovation strategy. Within the context of banks' legacy systems and the compliance driven regulated industry, smaller fintech start-ups (new and new to the industry) are appropriate and effective collaborating partners. It is perhaps the industry most suited to disruption from the "outside" in collaboration with the "inside".

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Why Banks Need to Innovate

"A wave of financial technology firms, many of them just a few years old are changing the ways in which people borrow and save, pay for things, buy foreign exchange and send money. In doing so they are finding and mining rich seams of profit, challenging the business models of existing institutions and inflating a bubble of excitement among investors that technology and the internet are about to change banking for good." (The Economist, 2013)

IDC Financial Insight sees the necessity for banks to:

- · enhance operational flexibility and
- optimise business processes
- innovate in product development and pricing,
- improve speed to market to stay competitive and dynamic and to
- keep pace with innovation and social phenomena in redesigning customer engagement strategies

"There is a perfect storm of evolving technology and increased customer expectations that is rapidly changing not only banking, but every industry."

Bradley Leimer, Mechanics Bank

It is predominantly through technology that these goals will be met (IDC Financial Insights, 2013) as is evidenced by the 2014 "Bankers as Buyers" report. It quotes Jerry Silva, Research Director of global retail banking for IDC Financial Insights stating that banks are proportionally spending less on internal IT resources and more on third-party providers. "The spending on the latter has grown to 45 percent of total IT spending, compared to only 28 percent 10 years ago". (William Mills Agency, 2014)

Bradley Leimer from Mechanics Bank summarised the situation when he said: "There is a perfect storm of evolving technology and increased customer expectations that is rapidly changing not only banking, but every industry." (Duggan, 2013)

"Smaller companies are more likely to come up with the disruptive technologies that cause the largest shifts in the status quo. The corollary to this is that large companies are in a constant state of peril, and vigilance is essential. As former Intel Chairman Andy Grove says, "Only the paranoid survive." (Rochlin, 2005)

Fintech Disruption

In the early 2000's IDC and American Banker seemed to have coined the phrase 'fintech' (technology companies in the financial services industry) by initiating the Fintech100 index. To be rated, companies must earn at least a third of their revenue from financial services.

Indicative of the financial services' reluctance to change, fintech has taken a bit longer than for example the biotech industry to get momentum and buy-in from those who should be their buyers – among them the banks.

Around 2010, financial technology acceleration programmes have mushroomed around the world. Perhaps this enthusiastic interest is one of the positive results of the recent financial crises.

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From a client point of view (business or retail), it seems that Wonga, Dwolla, Square and a number of other fintech companies, are significantly disrupting the financial services of the last hundred or more years, to their benefit. Perhaps clients are hoping that these providers will inspire and encourage banks to become more current and address their needs. But even these alternative financial services cannot afford to rest on their laurels.

Borrowing from Dave Rolich's book, *Hunter or Hunted? Technology, Innovation, and Competitive Strategy*: "While technology-driven competition is predictable in its intensity, even the most agile of firms can find themselves at the wrong end of the rifle scope. A successful and dominant incumbent firm, intent on maintaining or growing its market share, may quickly have to face a disruptive new technology that threatens the viability of its entire market. An aggressive and ambitious start-up may suddenly discover that a vanquished technology competitor has partnered with or sold out to a vulnerable incumbent, creating a configuration that puts the start-up on the defensive. In both cases, the hunter becomes the hunted." (Rochlin, 2005)

How Banks Innovate

Despite the odds, globally banks are embracing the innovation challenge in various ways. Global Banking News reported that in a study by InfoSys and EFMA, 77% of banks increased their innovation spend to generate increased revenues and a reduction in costs. Just five years ago only 37% of banks had an innovation strategy, as opposed to 60% of banks in the 2013 study. (Bank Allocation for innovation on the rise, says study, 2013)

Home grown solutions

Deutsche Bank believes in home grown software solutions and have set up a Silicon Valley-type operation in North Carolina. The DB Global Technology Division has been collaborating with the North Carolina State University for just more than two years. So far five classes of seniors and graduate students have worked to come up with new ideas for Deutsche Bank. One of their projects — a social networking system that lets sales people create a dossier on bank customers — is currently working its way through the bank's London office. According to Kristopher Tyra, heading customer-facing apps for the innovation lab "It's an effort that is less about big successes and more focused on fast failures." (Sposito, 2013) Deutsche Bank has seen the benefit of driving innovation and was recently announced as winner of 'The most innovative transaction bank in Europe award' by The Banker.

CapitalOne set up three Innovation Labs in New York, Washington D.C. and San Francisco, each one with a different focus area. According to Monique Shivanandan, CTO of CapitalOne, they combine technology, people, data analysts,

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Matteo Rizzi, Sberbank



marketing people, brand managers and product managers in the labs "to be sure they're not just focussed on cool technology, but innovative products and services to delight the customer". She also mentions that they acquired several start-ups to seed the labs with specialised technology skills. Their small and agile teams do frequent iterations and fast prototyping. In addition CapitalOne also established a community with technology companies, academic institutions and start-up venture capitalists, for them collaboration is essential. (Brandel, 2013)

MasterCard also has Innovation Labs that have been in existence since 2010 and work closely with business owners. According to Garry Lyons, Chief Innovation Officer, MasterCard uses three other ways to stimulate innovation, namely:

- Aspire: an online social collaborative brainstorming programme with more than half the company participating,
- Innovation Express: a 48-hour competition to build prototypes, video demos and go-to-market plans, and
- KickStart: a fast-paced, time-boxed, dedicated start-up-like environment to accelerate commercialisation of a product. (Brandel, 2013)

Venture Capital

Russia's largest lender Sberbank launched their venture capital fund, SBT Venture Capital in Dec 2013. For Matteo Rizzi, General Partner at SBT Venture Capital "The financial industry is clearly the largest eco-system that has not been disrupted yet and getting close to the start-up world is one of the smartest moves a bank can do". (Irrera, 2013) He adds that it is unlikely that a complex and heavily regulated organisation such as a bank can embrace innovation and even less likely to disrupt the industry from the inside. In his mind Fintech start-ups hold the key to what the new financial services can look like: a service shaped on the customers' current profiles, developed with agility, shared with social media technology in an innate way.

Sberbank is also one of the buyers at Matchi.biz (a website matchmaking banking innovators and buyers).

In the article 'Buying a piece of Innovation' Rusli explains that banks can benefit by tapping into the entrepreneurial mind-set. "Multinationals, with their huge payrolls and sprawling operations, are not as nimble as the younger upstarts. While they are rich in resources, big companies tend to be more gun-shy and usually require more time to bring a product to market".

Of the 750 corporate venture units, roughly 200 were established in the last 2 years, according to Global Corporate venturing, a publication that tracks the market. In the last year corporations participated in more than \$20 billion of start-up investment. Learning from their mistakes in the past, 'big bets' are however now replaced with smaller, more selective investments. Unlike traditional Venture Capitalists, multinationals are less interested in profits, they are here to buy innovations. (Rusli, 2012)

Accelerator Programmes

"The banking world is on the edge of a new era, and we think many services and products the banking industry is selling to customers will be completely different in a short time. The banking sector was somehow left behind in terms of disruptive technology when looking at other industries" says Nir Inbar, Business Development Manager in the high tech sector of the commercial banking



division at Bank Leumi. (Wisniewski, 2013) This Israeli bank recently partnered with Elevator, an Israeli firm creating accelerator programmes and investing in start-ups. Inbar adds "It's very hard to do innovation in-house... the financial world needs big changes in order to adjust to the internet and the way people think about financial products as commodities." As part of the Elevator programme start-ups will spend time in New York to experience the ecosystem and make the right connections. For Bank Leumi however, this programme is just the beginning of the innovation initiatives they're planning.

Many of the big name banks are supporting similar acceleration programmes. Fintech Innovation Lab, Innotribe@SIBOS, Startupbootcamp are all among those focused on and sponsored by the financial services industry, but do they really work?

Maria Gotsch, CEO of the New York City Investment Fund (NYCIF) run the Fintech Innovation lab as well as a similar programme for biotech start-ups because they believe that start-ups will ultimately facilitate job creation (Bloomburg News, Liu, B, 2010)

Unlike the biotech industry though, Fintech start-ups are typically run by people with prior business experience. The definition of 'start-ups' is therefore extended to include existing businesses entering the financial services market. Business experience is a benefit, but according to Ms Gotsch banks are such large organisations it is difficult to locate the right person to talk to. A gap the accelerators try to fill. (Pratt, 2011)

Looking at the different accelerator programmes the significant benefits (in addition to meeting the potential investors) include:

- Mentorship
- Reduced development time
- Pilot opportunities
- Introduction to the banking context: legacy systems, compliance and regulatory challenges
- An eco-system of innovation to stimulate collaboration and ideas

Kosta Peric Head of Innovation at Swift who is involved with Innotribe@SIBOS believes that banks must innovate or face being disintermediated. The value of these accelerators is to foster innovation and collaboration within SWIFT and with the financial services industry. "It is not a research and development project but about encouraging ideas and helping people to do something with them." (Pratt, 2011)

Innovation Eco-Systems / Online Communities

The latest development in how banks innovate is to become part of ecosystems which match makes fintech start-ups (new companies and companies new to the financial industry) with innovation buyers. Firms such as Matchi are focused on connecting innovators and banks across the world. Many of the worlds' largest banks including CitiBank, ABN Amro, First National Bank and Lloyds have joined Matchi, seeing that collaboration is the key to innovation.

One of Matchi's sponsor banks is CaixaBank, the largest Spanish bank and winner of various awards including EFMA and Accenture's 'Global Innovator Winner'

Late last year, while receiving the Bank Administration Institute (BAI) and Finacle award for the world's most innovative bank in Denver, the CEO Juan María Nin said "CaixaBank uses technology as



a strategic means of consistently improving service quality. Being leaders in innovation allows us to provide our customers with the best possible value proposition and further consolidate our leading position in the Spanish market." (Caxia Bank, 2013)

According to David Milligan, CEO of Matchi "We're excited to offer banks a different and fresh way to access positive, powerful and proven innovations from smaller fintech firms around the world."

Smaller firms produce more impactful innovation

Although entrepreneurship includes innovation, there is a difference between serial entrepreneurs and serial innovators. Small firms normally start with a great idea hoping to get the idea in the market place. If it fails the firm disappears, if it works the entrepreneur might sell out. Even if it does work, the next idea or a process to generate more ideas become a problem and often the small firm disappears after the first idea is worked through. Whatever the outcome the entrepreneur is likely to start another firm, becoming a serial entrepreneur. On the other hand "Serial Innovators are firms distinguished by their success in sustaining innovation" (Hicks & Hegde, 2005). The innovative efforts in serial innovators, look like innovation best practice in large firms and sometimes they become the outsourced R&D operations for large firms.

"A patent from a small firm is more than twice as likely to be found among the top 1% of highest impact patents compared to a patent from a large firm."

Hicks & Hedge, 2005

In addition, serial innovators tend to be specialist suppliers of technology who have a core technology rather than a core product. They tend to be interested not only in a new thing, but also in a new and different way of doing things.

In their paper 'Highly innovative small firms in the markets for technology' Hicks and Hedge defined small firms as those with 500 or less employees. They used patent information as a public record of sustained technical advance. Studying 1071 US firms with 15 or more USPTO patents issued between 1996 and 2000, they found that 356 were small firms who owned 6% of the 193 976 registered patents. (Hicks & Hegde, 2005)

They also found that small firms produce higher value innovation. Using citation as a measure of impact, they compared patents' citation in the same field (taking into account the age of the patent). The citation index was on average 1.53 for small firm patents and 1.19 for large firm patents showing that small firm patents are more effective in producing high value innovations. In fact a patent from a small firm is more than twice as likely to be found among the top 1% of highest impact patents compared to a patent from a large firm.

Alternative Financial Services

Discussing innovation in the financial services industry is not complete without a look at alternative financial services (AFS), the smaller serial entrepreneurs and innovators now infiltrating the industry.

It is a diverse group that includes cheque-cashing outlets, money transmitters, car title lenders, payday loan stores, person-to-person lending and quick loan options. These providers typically use different channels offering ease, sometimes reduced pricing and in many cases serving the under- and unbanked.

"...typically the new companies don't take the profits of the old companies; they make the profits of the old companies go away."

Prof. Clay Shirky New York University

On their website, FIS Global's Bob Legters describes the building blocks for alternative financial services:

- Customer service consumers will pay a 9% premium to resolve issues through a live representative.
- Digital services: 3 out 5 consumers demand more digital options rather than traditional servicing methods.
- Developing innovative product features that matter to customers.
- Reduced interchange fees
- Big data usage: Ability to create real value and insight based on the consumer's historical spend.
- Transformation to an omni-channel experience.
- Fee transparency

Legters adds the following as factors driving growth and accessibility in the alternative financial services industry:

- They exist in a stream of continual innovation; as technology advances, they find new ways to capitalise on those advances.
- They are more readily accessible and flexible in their operations and hours, making them incredibly convenient.
- While their fees seem prohibitive at first glance, in an economy where traditional banks tightened their loan restrictions, many AFS providers loosened theirs, making them significantly more flexible and cost effective, so the fees are not an obstacle to those in need of these services.
- Many are not bound by the requirement for an existing banking relationship

In a McKinsey & Co interview with Clay Shirky called 'The disruptive power of innovations', Clay talks about the media industries with perhaps a warning to the well-established financial service providers: "... typically the new companies don't take the profits of the old companies; they make the profits of the old companies go away. You end up having to shift from operating in a position of scarce resources and abundant profits to a world of abundant resources and scarce profits. And the design of businesses and organizations in that second world is very different from that first world." (McKinsey & Co, 2014)



The case for collaborating with small tech firms

"Companies cannot innovate as fast as start-ups; increasingly they realize they have to look outside" states Gerald Brady, Managing Director at a Silicon Valley Bank. (Rusli, 2012)

Ed O'Brien, Director of Banking Channels at Mercator Advisory Group feels that in addition to getting appropriate technology, at the right cost with no obligation to update and maintain it, partnering with external tech firms will allow bankers to focus on banking, while the vendor focuses on technology. "The smartest people work for somebody else."

> Bill Joy, Co-founder of Sun Microsystems

He added that most of the smaller banks typically don't have the technical resources or specialised knowledge to develop, for example, sophisticated mobile banking platforms. Generations Bank launched its first mobile app in January 2013, partnering with technology services provider Banno, to implement its Grip application. By June that year, Generations gained huge support from its online user base and the adoption of the mobile app is growing at about double the expected rate. (Yurcan, 2013)

Start-ups are inherently innovative also in their recruitment methodologies. As described by Mary Wisniewski in the American Banker, even their human resource officers have interesting titles like 'director of culture and talent' or 'vice president of people and places'. For example they host events where they serve candidates free drinks and pizza, provide dedicated music rooms, host "Game of Thrones" theme nights or organise retro arcade nights allowing employers, employees and prospects to get acquainted in a relaxed atmosphere. Some offer training programmes to teach coding with the possibility of a full-time job, once successfully completed. (Wisniewski, "Drink Ups", Music Rooms: How Fintech Companies Recruit Talet., 2013)

In an interview with McKinsey & Co, Andrew McAfee, Principal Research Scientist, Centre for Digital Business at the MIT Sloan School of Management, predicted a big change in the way the very best organisations are making some of their key judgments, forecasts, predictions and decisions. "The tough transition is going to be getting the people and the alleged experts out of the way, and teaching them to be a lot more humble and a lot more data driven."

He said that there is truth in Joy's Law, named after one of the founders of Sun Microsystems, Bill Joy: "The smartest people work for somebody else." Organisations have access via technology, networks, and very powerful devices—to a worldwide body of knowledge, talent and skill. All that is necessary is the ability to articulate the problem or challenge and to open it up to the world's community of innovators and problem solvers. "Thinking that all the expertise that you need is inhouse or that you know where to go to get the expertise or the help for the big challenge that you're working on—that's a really dangerous assumption." (McKinsey & Co, 2014)



Matchi is a global innovation matchmaking platform enabling innovators to showcase their latest, market ready innovations, and for banks to purchase these innovations from anywhere in the world.

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