Further, faster: Mastering digital reinvention in retail banking

Start-ups are now generating most of the innovations in financial services. Banks have to step up their digital innovation or watch their customer base erode.

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The spread of digital technologies poses a double-barreled challenge for retail banks: *transformation* of the existing business and *reinvention* through development of new business models. Most banks focus on the former. But compelling evidence suggests that most banks won't thrive, or even survive, in the coming years unless they pursue both at the same time. The bulk of reinvention now occurs outside retail banking, in firms that address customers' financial hassles and attack lazy profit pools.

Customers' traditional needs to borrow, save and make financial transactions remain much the same. But their rapid adoption of digital tools and expectation of using the channel convenient to the moment have prompted many banks to try to fuse the best of their digital and physical assets, and thereby transform their existing businesses. As discussed in a recent Bain Brief, "Building the retail bank of the future," this Digical® strategy shifts more activities to the Web and to mobile applications, which gives customers self-service options and speeds up processing. Going Digical can also reduce the volume of costly basic transactions at branches and contact centers.

One bank in Europe, for instance, sells 20% of its mortgages over split-screen video technology. At another European bank, almost one-third of personal loans come from one-click, preapproved mobile phone offers.

Transformation entails using digital technologies to enhance the physical business model, moving offline processes or interactions online, and sometimes reimagining how a customer can do business. Yet replicating offline experiences online won't be sufficient. Banks also should use the full potential of new technologies to create entirely new services and propositions—and they'll have to do it simultaneously with their Digical transformation (see Figure 1).

What makes reinvention essential? Why not focus only on transforming current businesses?

The reason: A wave of digital start-ups in financial services has swelled from just a handful a few years ago to thousands today, with incubators and accelerator hubs in many major cities. These start-ups have intensified the pressure on revenues that banks already felt amid low interest rates in many

Figure 1: The twofold challenge

Digical® transformation

Transform today's core business

- Digital and physical assets
- Incremental improvements
- Seizing immediate opportunities
- Product, brand and operations managers
- Staying in the game
- Typically measured on
    - Profitability/return on assets
    - Cost of servicing
    - Customer satisfaction
    - Brand equity

Digital reinvention

Invent new business models

- Digital
- Quantum leaps
- Opening up new digital horizons
- Entrepreneurs, engineers and designers
- Rethinking and redefining the game
- Typically measured on
    - ROE/cash on cash multiples
    - New segments/market entries
    - New customer acquisition
    - Talent pool

Source: Bain & Company

developed markets and increasing regulation in most countries. With their low-cost structure and freedom from legacy IT systems and regulatory burdens, the digital firms target specific customer needs, rather than specific markets or competitors. Their founders are hungry and comfortable with disruption. They wage war on behalf of dissatisfied customers. Consider a few examples:

- eToro's Israeli founders fulfilled investors' latent desire to follow and automatically copy, in real time, the actions of other investors. By breaking into the members-only realm of Wall Street and financial brokerages, eToro has built the largest social trading platform, with four million registered users in more than 140 countries.

- San Francisco-based Lenda wants to be the "TurboTax for mortgage," providing a platform that allows borrowers to complete the home loan process completely online. Lenda has shortened the refinancing process to 21 days, down from the average of about 60 days in the US mortgage industry, and it aims for seven days.

- Atlanta-based Kabbage, using multiple data sources to assess risk, has developed an underwriting process that takes only a few minutes to lend small businesses and consumers up to $100,000.

- Even digital upstarts chartered as banks don't always resemble traditional banks. Fidor Bank may be based in Munich, but in spirit and behavior it has belonged to the Internet since being licensed in 2009. Fidor customers can earn €50 if they create a "user-help-user" video on YouTube and the bank accepts it. In one campaign, Fidor cut its lending rate and raised its savings rate by 0.1% for every 2,000 "likes" it received on Facebook. Customers can buy currency online and make payments in a variety of currencies through Currency Cloud, a multicurrency, regulated e-wallet. When they apply for a loan, the execution takes seconds. And the 300,000 people in Fidor's community—65,000 of whom are account holders—exchange opinions and advice online rather than in line at the branch.

Some digital attackers cut into banks' profit margins. Others cut into both volume and margins. And some disruptors totally disintermediate banks *(see Figure 2)*. As a result, large shares of retail bank revenues are at risk of migrating or disappearing by 2020—at least 30% of revenues in Germany, France and Italy, we estimate.

Make no mistake: Some of these upstart models already have substantial revenue, even an operating profit, while others will reach that stage fairly soon. Some, such as Currency Cloud, take tiny fees on many transactions—a cents rather than millions business model.

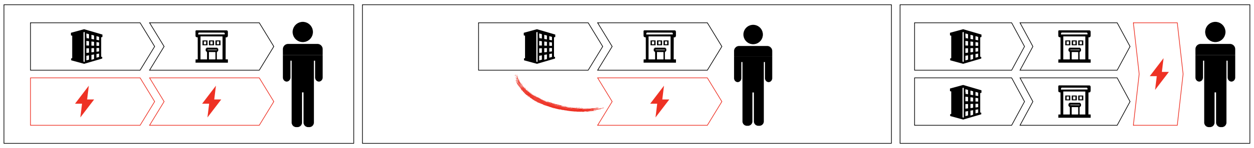
The proliferation of digital start-ups constitutes a third wave of major banking technology innovation, on par with the telegraph, which enabled the formation of branch networks, and with early mainframe computers and networks, which enabled ATMs, credit cards and other payment mechanisms, as well as back-office processing centers. During those prior waves, banks mostly copied each other's innovation, but today many of the advances in banking come from entrepreneurs who consider themselves technologists, not bankers.

For entrepreneurs with a good idea, it costs little to start and expand a business. They can rent technology infrastructure and do their marketing through Internet search, social media and app platforms. They get operations up and running quickly. From Auxmoney in Germany to Zopa in the UK, the growing ecosystem of start-ups stands to siphon off the more profitable lines of banks' business, especially the pools of lazy profits such as foreign exchange fees and card-not-present fees. By targeting specific needs with convenient, low-cost innovations, the digital attackers can attract millions of customers in short order.

That's why most traditional banks need to quicken the pace of their own digital reinvention. The salient questions for banks are not whether to take the plunge, but rather which businesses they should invest in, how much to invest and how to differentiate themselves to customers in the new landscape.

Pursuing both transformation of existing businesses and reinvention involves separate approaches with separate

Figure 2: Start-ups change the rules of the game and challenge banks' traditional roles



Aggregators		Innovators			Disruptors	
Comparison sites increase pressure on loyalty and price **Examples:** Money Super Market, Check 24	Personal financial management solutions become customers' primary interface **Examples:** Mint, mvelopes	Social investing apps become main source of investment advice **Examples:** eToro, Personal Capital, justETF	Payment players attack banks' traditional core business **Examples:** PayPal, Square, Yapita	Lending platforms leverage Big Data **Examples:** Kabbage, auxmoney, OnDeck	Peer-to-peer platforms cut out banks as the middle man **Examples:** Lending Club, Lendico, Zopa	"Easy banking" providers appeal to customers **Examples:** Simple, Moven, Fidor Bank
Banks lose direct customer contact, experience margin pressure	Banks lose their role as the customer's main financial hub	Banks see decreased need for their product creation and advice	New firms take over banks' business, move up value chain	Lending platforms replace traditional bank sales channels	Peer-to-peer finance without banks becomes mainstream product	Traditional banks see customers lured away to other providers

Source: Bain & Company

logic. Digical transformation occurs incrementally and from the inside out. It requires changing an entrenched culture that's often characterized by apprehension or even fear of the disruption—including new skills and job duties—that may follow from new digital tools. Learning how to manage that change will consume substantial time and attention for bank executives.

Reinvention, by contrast, succeeds by taking an outside-in perspective that starts with customers' needs and priorities—things like managing cash, buying a home, saving for a child's education—then tests different innovations that could address those priorities. Of course, the innovation might cannibalize some part of the bank's current business, though better the bank cannibalizes itself than allow other companies to take the lead.

Entrenched processes and cultures often tend to work against internally developed reinvention, because incumbent companies want to protect current profits. For these reasons, reinvention generally should be managed with separate funding and governance, through separate engineering and design teams, and through partnering and venture units that operate at a distance from core bank operations.

In the realm of innovation, most banks struggle to make their organizations keep pace and a clear purpose. We often see one of two extreme reactions. Some bankers become paralyzed by choice and their perceived lack of discretionary funds; they risk losing market share to faster-moving incumbents or new entrants. Other bankers that hastily pursue a string of unconnected initiatives risk squandering large investments that yield little return.

Even executives who know they have to make digital investments over the coming years may not be clear where to start and how to proceed. Banks can overcome organizational obstacles by taking a stringent, integrated approach to funding, governance and talent management.

Funding: Think like a venture capitalist

The traditional banking mindset and metrics tend to reject initiatives that won't move the needle for a large business, that don't get built internally or that can't satisfy long-standing capital expenditure hurdles such as in-year returns. In the classic large bank relying on net present value calculations and traditional business cases, most digital innovations won't receive sufficient funding or attention.

Instead, bank executives should think and act more like venture capitalists, says Nadeem Shaikh, cofounder of the Anthemis Group, a leading digital financial services investment and advisory firm. Venture capital firms tend to invest in a portfolio of options. They make many small investments instead of betting heavily on one or two. As the options mature, grow and pass stage gates, venture capitalists steadily increase the size of their investments. Most venture funds invest with a decades-long perspective rather than a quarterly mindset, Shaikh notes (*see Figure 3*).

"Small bets spread the risk and give you a better understanding of how the business models work and which will best fit with what you're trying to accomplish," Shaikh says. "Smaller bets that don't work out are also easier to write off financially. They shouldn't be counted as failures, but rather as a necessary part of experimentation and insight gathering."

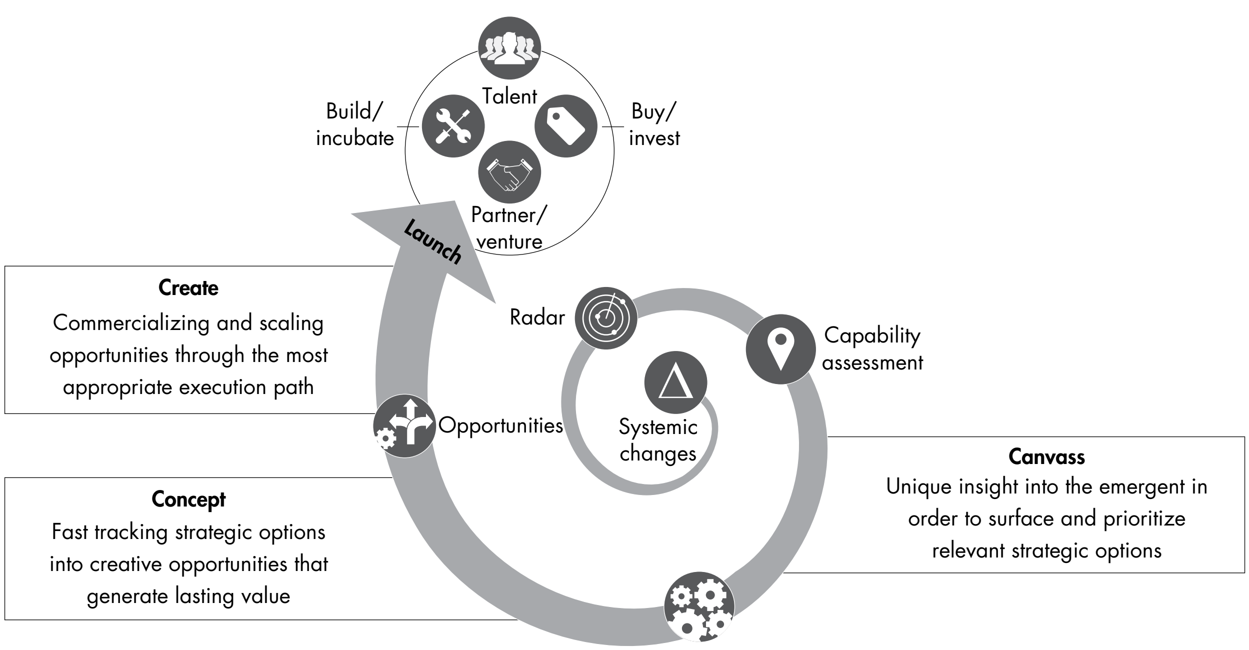
When experimenting, bank executives should avoid the herd mentality by focusing on what's right for the bank's particular situation. Sending executives on a week-long tour of Silicon Valley incubators and tech labs, for instance, may light a spark but will not turn bankers into A-level digital investors. Shaikh notes that many large banks have launched their own $100 million tech investment fund over the past year and seek to replicate the latest hot deal: "After BBVA bought Simple, a lot of banks said 'I want one of those.'"

Governance: Running several innovation models at once

In creating an innovation pipeline, no single organizational model works best. A more effective approach involves choosing from a portfolio of models that run along a continuum of internal to external development.

At one end of the continuum, a grassroots model functions inside a business unit and can span ideation to product launch. The other end includes either a straight acquisition or a spin-in model, in which employees leave with seed capital and hope to be acquired if successful, as happened when Cisco Systems bought Insieme Net-

Figure 3: The Anthemis Group methodology used for digital reinvention involves casting a wide net to canvass the options and then create and manage a viable portfolio of options



Source: Anthemis Group

works. The spin-in structure allows a company to safeguard its allegiance with former employees rather than risk competing with them or losing them to a rival.

Each model has strengths and weaknesses. Internally run innovation fosters creativity among employees but will rarely produce a disruptive innovation, and for most banks it requires substantial cultural change. External models give a bank flexibility to identify market transitions and pursue an acquisition at the appropriate time. But they come at a high cost and might hinder nascent organic innovation. So an individual bank needs to carefully choose models that fit its goals and capabilities.

Many large banks try out several models at once. They run internal "skunk works" and also operate venture funds to invest in promising start-ups.

Citi illustrates the trend. It launched its own innovation lab in Singapore in 2011 with the goal of co-creating digital solutions with its clients. The Citi lab developed a mobile payment solution for Coca-Cola that eliminates the need for cash collection. Looking externally, Citi Ventures, launched in 2010 in Silicon Valley, has invested in more than 15 firms such as DDMap, a Chinese provider of location-based services that motivate people via mobile devices to visit physical stores.

Some banks that decide to innovate through internal models have abandoned the traditional waterfall IT development approach, which relies on remote release dates and thus struggles to catch up as the marketplace changes. Leading organizations, such as Capital One Labs, have moved instead to Agile development, which delivers functionality in many bite-sized pieces.

Governance of internal models requires more than just installing Agile development teams, however. The entire ecosystem around the team needs to be redesigned, including implementing a process to ensure that the team building a business has a pre-allocated budget, resources and approvals. The Agile group should maintain regular communications with a senior executive leading the relevant line of business. And it can employ cloud-based development environments in order to reduce cycle times.

With most financial innovation occurring outside traditional banking, the external models likely will be prominent in the near future. At the very least, a bank must become familiar with the ecosystem of financial services start-ups, learning about their processes and cultures. At best, it can formally engage with those companies, as the pharmaceutical industry has done to revive growth (see the sidebar, "Lessons from Big Pharma").

BBVA, the Spain-based multinational financial group, has used several models to structure its digital reinvention. BBVA's venture arm, for instance, makes strategic investments and acquisitions to add new offerings and capabilities faster than the bank could accomplish in house. BBVA's acquisition in 2014 of Simple, an American online-banking platform, both expanded BBVA's US presence and took hold of an innovative mobile money management offering. Simple's mobile app allows users to easily figure out how much they spent on meals or transportation over the past month, how much they can spend in the next month, or whether they're on track to reach savings goals. Its customers—who are much younger than customers of the average traditional bank—log on more frequently than users of the typical bank website.

Some banks have pursued innovation by formally engaging with start-ups, such as BBVA with Simple and Dwolla, and Capital One with Adaptive Path.

BBVA operates Simple as a separate subsidiary with the same management team, because an incumbent bank can't easily replicate the entrepreneurial culture of a start-up. That logic also informs another of BBVA's major models: an open platform initiative where the bank interacts with external developers and potential partners to develop new product ideas and get help with product debugging.

In one competition, BBVA invited developers to create mobile apps based on anonymous BBVA card transaction

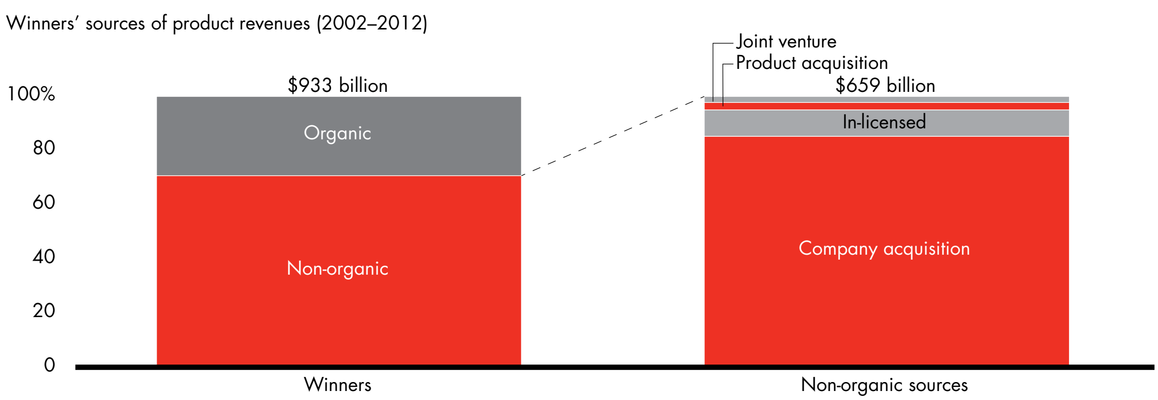
Lessons from Big Pharma

Banks committed to digital reinvention can take a cue from the experience of pharmaceutical companies over the past decade. Many large pharma firms, which had been suffering from declining productivity in R&D, increasingly looked outside for biotech and small pharma firms with promising ideas and greater shareholder value growth. Gradually, they put in place standardized ways of working with the biotech partners.

Roche, for example, now dedicates about 100 professionals to partnering activities. They travel globally at the behest of disease units such as oncology to seek out interesting molecules that can fill the gaps in the company's own product pipeline. This unit has built capabilities in mining the ecosystem, deal structuring and completion, and relationship management. Roche and other like-minded large pharma firms put a high value on optionality—the right to license or buy technologies—because it works. Data from EvaluatePharma shows that from 2002 through 2012, the top eight pharmaceutical firms in shareholder returns got more than 70% of their revenues from products developed externally, typically through acquisitions (see Figure 4).

Banking has experienced similarly low rates of innovation productivity and a rapid expansion of start-ups that have changed the game. Partnerships, joint ventures, licensing arrangements and outright acquisitions all can generate innovation and differentiation. BBVA Compass's recent partnership with start-up Dwolla allows the bank's customers to move money in real time, which traditional clearinghouses don't do. A distinctive capability in partnering can be combined with a bank's inherent advantages, such as payment utility infrastructure, regulatory management and a distribution network, to yield superior economics.

Figure 4: Leading performers in pharmaceuticals delivered 70% of their revenues through external sources



Notes: "Winners" includes Biogen Idec, Celgene, CSL, Gilead, Novo Nordisk, Valeant, Pfizer, and Roche; sales from new drugs developed after a company is acquired are categorized as organic
Source: EvaluatePharma

data. Cash prizes went to developers of several apps, including Qkly, which helps users plan their time by estimating when a place will be crowded. Another competition by BBVA and Google awarded prizes for apps that tackle problems experienced by small businesses or that improve organizational efficiency of BBVA's new headquarters in Madrid. As a side benefit, BBVA's Big Data team hired some of the winning developers.

Talent management: Banks come from Mars, start-ups come from Venus

Building a culture of innovation seems alluring. But what exactly does this mean? Which ingredients allow an organization to get the most from its people?

Looking inside one of the most consistently innovative companies worldwide, Amazon, we find that innovation touches everyone's job, not just senior leadership. CEO Jeff Bezos has emphasized three things:

- Look for people with a creative track record. Bezos asks all job candidates to tell him something they've invented.

- Decentralize the process of devising new products or services so that the majority of employees expect it to be part of their job. Amazon usually tackles an innovation challenge through a two-pizza team—a team small enough that it can be fed with two pizzas and thus stay close to the nitty-gritty development of a product or tool.

- Encourage experiments because they rarely turn out as expected, and because they provide insight and instruction.

Banks will not become financial Amazons overnight, but they can start to instill the right behaviors and norms to foster innovation. They can encourage employees to spend 10% of their time developing "crazy" ideas; tolerate failures as opportunities to learn; and hire people with new skills and experiences, from Web designers to ethnographic researchers skilled in observing how customers behave.

Amazon also has incorporated external innovation, such as its Zappos acquisition, to promote growth. In banking, Capital One understands this imperative. It has doubled down on mastering the digital customer experience and recently acquired Adaptive Path, a San Francisco start-up specializing in digital design and the user experience.

For many banks, though, partnering with digital start-ups won't come naturally, as their cultures and ways of working differ so greatly. Start-ups tend to move quickly and will tear up what worked yesterday if they don't think it will work tomorrow.

So banks will need to learn how to create an environment that helps fledgling partners succeed rather than stifling them. This might be handled through an executive who keeps the rest of the bank at bay until the initiative can be scaled up. And it requires investment in capabilities around relationship management, business evaluation and due diligence, and deal structuring.

Bankers will also need to change their mindset. Executives at large incumbent companies tend to be future *takers*, meaning they either view the future passively, with no power to shape it, or view it defensively, and want to fight or delay it. Insurgents, on the other hand, tend to be future *makers*, with faith that they can capitalize on disruption and innovation. (For more details on this phenomenon, see Bain's Founder's Mentality® blog.)

Banks really have no choice: reinvent themselves as strong digital entities or fade away as the customer base erodes. If mortgage completion can be compressed to seven days, what happens to traditional bank revenues and profits when a start-up finds a way to reach two days—or two hours? And what's to stop the major technology companies from moving into financial services niches? Banks have to speed up their digital reinvention, with the help of outside partners, or lose out to the more nimble set of providers.

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