Crossfire: 'The era of banks as the main financiers of MSMEs is ending, to be replaced by innovators such as crowd-funders and mobile network operators'

KOSTA PERIC AND LISA WILHELM

Dear Lisa,
I think the era of banks as the main financiers of MSMEs is ending.

Imagine yourself as an electro-mechanical engineer back in the late 1940s. This was a period of vacuum tube electronics, and appliances using this technology were in wide use, from households to heavy industry. It was a time when the technology was mastered. This vacuum tube 'castle', a safe and predictable technology, had gone through many cycles of improvement since its inception at the turn of the century. However, it was clear that the technology was reaching its limits in many applications that required different characteristics of portability and power consumption. The 'sandbox' experiment that would revolutionize the whole field of electronics had been carried out by Bell Laboratories and was unveiled in 1948 – the transistor. We know what happened next. Of course, with the benefit of hindsight, it is clear that the transistor would sweep away the old technology. But I'm sure that it was not so obvious to electro-mechanical engineers a few short years before 1948.

Yes, dear Lisa, the financing of MSME by banks is the vacuum tube of today, and I wonder if traditional bankers imagine that something like the transistor may come.

And, by the way, what is this nemesis transistor? What are the new things that will make the current way of financing so obsolete that it will have to change drastically? I think we can see some early examples of what is to come – follow me for a second and let's imagine the future.

Let's first quickly revisit some basics. When you talk about financing, deep down it is a matter of culture – it's a belief system where the lender and the borrower share a vision of success. The entrepreneur borrows to grow her idea, and the lenders grow their business by having a successful portfolio of investments. The trust grows from the connectedness of the two parties – knowing more about each other so that risks can be properly understood and valued. What is the level of connectedness between today's mega banking corporations and MSMEs (micro, small and medium enterprises)? I think it's very low, leading to low levels of trust and

Kosta Peric (kosta@peric.eu) is with Financial Services For The Poor, Bill & Melinda Gates Foundation, and Lisa Wilhelm (lisa@globalpayexperts.com) is the Founder and Managing Partner of, Global Payments Experts llc.

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thus proportionately high levels of collateral and guarantees required from small entrepreneurs. Things they usually don't have.

On the other hand, our hyper-connected world makes it much easier to connect to and get to know about the entrepreneurs themselves and the idea or product that is being proposed. This creates a new concept of trust leading to a new model of financing.

About the entrepreneurs, I'll use the following two examples coming from the unbanked world I care about every day:

- Lenddo's community members can use their reputation on social networks such as Facebook, Linkedin and Twitter to obtain loans.
- M-Shwari is a new service introduced by Safaricom to complement their M-PESA mobile money transfer service, which allows customers access to a micro-credit loan any time and to receive their loan instantly on their M-PESA account. The loan amount is determined by one's savings, loan repayment behaviour and usage on Safaricom services.

About the idea or product being proposed, I'll use the example of Kickstarter, a crowd-sourcing platform, where entrepreneurs can pitch their idea for a product and get financing from people on the internet interested in buying the product or benefiting from the idea.

In all three of the above examples, the level of trust is increased by the connection between the lender and the borrower, with the effect of reducing the need for the collateral required in traditional bank lending.

So, Lisa, do you think these new internet-inspired methods have the potential to change the MSME-financing landscape?

Kind regards
Kosta

Dear Kosta,
I loved your vignette about the transistor, arguably the most important invention of the 20th century. I found your depiction of bank MSME financing as the vacuum tube of today a bit less persuasive.

Here I think, the more apt comparison is the impact of Moore's law: the number of transistors in an integrated circuit doubles approximately every two years or so – and has done for over 50 years. This relentless march has culminated in this perhaps most transformative next phase of the digital age.

What is different now, and why does it matter here? First, big data: IDC says the world's stock of digital data will more than double in size every two years between 2013 and 2020, fuelled by the phenomenal intersection of mobile, cloud, big data, electronic payments, and social data. Importantly, the division of this digital universe will switch from 60 per cent in mature markets today to 60 per cent in emerging markets by 2020. Second, analytic and processing capabilities have made similar leaps, dispersing algorithm-driven intelligence faster across digital networks, themselves often housed in the cloud, at plummeting transaction costs. Third, smart mobile devices make this information and computing power accessible to users around the world.

In the new age of digital MSME finance, big data volume, variety, and velocity mean that more, alternative data (provided it is predictive data) can be credit data. And, the faster you can analyse the data (much of it is real-time) the more predictive the value. Taking advantage of these technology advances, robust attackers scaling up with incredible speed are artfully inserting themselves between banks and their MSME customers, zeroing in on the lucrative MSME lending and payments value chains that banks covet.

By offering, as you say, more trusted and transparent, faster, easier, and better-fitted financing solutions, these nimble digital disruptors – all built on a lean, asset-light business model – do indeed pose an increasingly credible threat to banks.

Does this mean game over for banks? I would argue no. Incumbents have strengths they can play to as they defend themselves against digital attackers. For one, they have a customer base, many quite large. They have a brand. And they have extraordinarily valuable data they are not even using (but the digital interlopers are freely feasting on).

Nonetheless, to win, banks must become digital, connected, and integrated with their MSME customers' everyday lives – therefore, they must develop the digitization playbook of their attackers and commit to MSMEs. Let's take a closer look at that playbook, amplifying beyond the new paradigms of trust between lender and borrower/entrepreneur you so rightly noted. I would like to shine the spotlight more specifically on the MSME digital marketplace lending ecosystem that poses the biggest threat – but also new opportunities – for banks.

While business models vary, this ecosystem includes peer-to-peer MSME lenders, online direct lenders, online MSME invoice financiers, online supply chain financiers, and mobile micro-lenders (already each paired with banks). It also includes innovative analytic firms that are revolutionizing MSME credit models with state-of-the-art advanced analytics that are working with banks and non-banks alike. These digital MSME lenders have convenience, cost, speed, and new data credit-screening competitive advantages over traditional bank MSME lending.

In addition to the traditional credit data sources, they have developed new insights gleaned from their own data sources and algorithms most banks have not even begun to consider. These range from business checking, card, and mobile transaction behaviour, merchant revenue from e- and m-commerce sales, and business accounting software to UPS shipping records, social media rankings and relationships, and even the amount of time a borrower spends on a lending site deciding how much to borrow.

In essence, they are able to build more predictive credit scoring models, thus underwriting better credit quality loan pools than banks. As the accuracy of the data and model increases, the marketplace lender can offer borrowers lower rates, which in turn attract more borrowers and drive more data into the model.

Convenience – simplified applications, fast decisions and funding – wins business for these marketplaces even when rates and fees are significantly higher than banks (e.g. most online direct lenders and mobile micro-lenders).

Moving MSME lending online also generates operating cost advantages of over 400 basis points compared to traditional banks (burdened with branch networks, regulatory costs, and fatter operations). Bankers simply won't be able close this efficiency gap through cost cutting alone.

Leading MSME banks can, and are, emulating all of these advantages. 'Friending' these alternative lenders is another way to stay in the game. In June, Santander signed a deal with Funding Circle to refer its MSME customers to the P2P MSME lender, just weeks after San Francisco-based Union Bank agreed to sell some of its personal loans through Lending Club.

So, yes, my dear Kosta, I do think these alternative lenders will change the MSME financing landscape. But I also think that (many) banks will very much be a vibrant part of that transformed landscape. With up to 60 per cent of their MSME banking income at risk, the stakes are simply too high to do otherwise.

Best regards,
Lisa

Dear Lisa,
The technologist in me likes your thesis that big data, analytics and mobile devices are changing the landscape of the lending business. In fact, my thesis that hyper-connectivity increases trust levels is very close to these arguments – all these technologies increase the level of knowledge that each party has of the other, and thus increases the probability that the financing transactions will ultimately be seen as successful by all parties.

The question remains in my mind: will banks realize the potential of these technologies? Will banks change their current business models to adapt to this new paradigm of trust between lenders and entrepreneur borrowers?

I like your observation that banks already have a lot of assets to get them going on this new opportunity, especially the huge number of transactional data they have from numerous data sources. And also that they 'must become digital, connected and integrated with their MSME customers' everyday lives'. I also know from my past experience there are three changes that are very difficult to make in large, established organizations such as banks:

- Integrating data from many sources. There are many 'silos' in banks, and they can be organizational and also technological. Integrating all sorts of legacy systems can be difficult, and especially costly.
- Trying out new business models. Banks, like many businesses, tend to be focused on optimizing their current way of working, and not necessarily on looking for new business models.
- Partnering with small, entrepreneurial organizations and start-ups to leverage new ideas and business models. Many banks are simply not equipped to scan for these start-ups, let alone do business with them.

So it's not about the technology, Lisa, it's about changing the mindset. You know me, I'm an innovator and have always been an optimist. I have worked in large, established organizations for a long time. My book *The Castle And The Sandbox* provides advice on how to step out of your established, core business (the 'castle') and experiment with new business models in a controlled and risk-managed environment (the 'sandbox'). All of this can be done, provided there is a true willingness to innovate, in addition to – as you say – cost cutting alone.

On the other hand, banks could also decide that peer-to-peer lending and MSME lending is really a different, adjacent business to theirs, not in conflict with their interests and best left to these better-equipped newcomers.

One parting thought: There are start-ups and entrepreneurs out there that are keen on providing tools for established players to embrace new ways of MSME financing. An example is InVenture (www.inventure.org), which is active in a business area close to my current interests – micro-financing and, more generally, making life better for the world's poorer people. InVenture are focused on helping financial institutions integrate all the technologies we have mentioned.

So, dear Lisa, the question is: which banks will step out of their castle?

Kind regards,
Kosta

PS: I'm not affiliated in any way with any of the mentioned companies. I'm familiar with them through my activities and only using them as illustrative examples.

Dear Kosta,
My friend, you are spot on – building a data-driven, customer-centred relationship with MSMEs is a new frontier for banks. Let's face it. For the most part, banks have not exactly burnished their reputations with MSMEs or by being the most innovative players on the planet. And MSMEs' negative perception of banks is a much broader issue than a lack of credit; it is also very much about MSME frustrations with the process of bank MSME lending and responsiveness to MSME product and service needs.

It is not wholly the banks' fault: bankers are wired to mitigate risk and disruption, not perpetuate it. In the wake of the financial crisis, increased capital and liquidity requirements, a tidal wave of new, sometimes byzantine regulations, and shrinking returns on equity make breaking out of their risk-averse 'castles' even more daunting.

Line-of-business and customer data silos compound the challenge with an incoherent view of the customer. For banks, leveraging, mining and exploiting customer data, let alone the new data streams of the expanding digital universe, has too often been an afterthought. In fact, there was such distance between banks and their customers that 'Know Your Customer' legislation was required to force banks to get to know them better!

In contrast, the rapidly growing emerging crop of technology-driven marketplace MSME lenders put customer needs and analytical data at the centre of their business models, setting forth new blueprints for disrupting the MSME lending status quo. Box 1 profiles some of these new digital MSME credit assessment platforms, approaches, and selected actors that are sweeping across the globe.

That these companies are simultaneously launching nearly identical products in markets that could not be more different demonstrates just how profoundly technology is levelling the playing field and allowing SMEs anywhere in the world to leapfrog traditional bank MSME lending barriers.

In a short time, these alternative lenders have dispelled the long-held notion that financial institutions cannot lend to small businesses in a scalable, efficient, and profitable manner.

Analytic firm flowers are also blooming around this digital MSME lending ecosystem to help banks and non-bank lenders manufacture brilliant data and make brilliant use of it.

Besides **InVenture**, others I like with both MSME-specific alternative

Box 1. Digital MSME online marketplace lenders

- *Peer-to-business (P2B) lenders*: **Lending Club** and **Dealstruck** in the US; **Funding Circle**, **Thin Cats**, and **Money&Co** in the UK; **PPDAI**, **Renrendai**, and **Yooli** in China; **Liwwa** in Jordan (the first P2B lending site with Sharia compliance); **Milaap** in India; **isePankur** in Estonia; and **Society One** in Australia enable lenders (investors) and MSME borrowers to find each other online and agree to terms without involving banks or lending their own capital.
- *Online supply chain financiers*: **GO Finance** in Tanzania and **Kinara Capital** in India analyse sales and delivery data for MSMEs inside vertical supply chains where the necessary MSME credit decision-making data actually exists. By technically integrating with top-level fast-moving consumer goods players (e.g. Airtel, Coca Cola) or network partners (e.g. retail chain Mother Earth for artisan, cooperative, and fair trade suppliers), they can digitally assess credit, substantially lower the cost of acquisition, and offer flexible terms at below-market rates.
- *Online direct lenders*: **Square Capital**, **Kabbage**, **OnDeck**, **Quarterspot**, and **CAN Capital** in the US, **Kopo Kopo** in Kenya, **NeoGrowth Credit** in India, **Zoona** in Zambia, **Advanced Merchant Payments (AMP)** in Hong Kong, and **iWOCA** and **ExBob** in the UK, as well as digital giants **Amazon**, **Paypal**, and **Alibaba**, lend their own capital directly to MSMEs.

  They supplement or substitute for traditional credit data with mostly real-time, electronically verifiable MSME cash flows and other data which they combine with sophisticated advanced analytics to make fast, low-cost, automated MSME credit decisions for working capital and/or term loans. For example, **Alibaba** loans cost just 5 cents (1/1000th the cost of traditional bank loans) and are 100 per cent automated, accessing more than 100 computer models to process over 80 billion data points.

  These platforms generally provide loan origination, automated daily or other frequent periodic loan payment deductions from business accounts, ongoing risk management, and continuous feedback of data analytics. Among others, OnDeck, AMP, and Alibaba also have strong bank channel, wholesale funding, servicing, merchant acquiring, and/or data-sharing partnerships.
- *Online MSME invoicing financiers*: **Fundbox** and **PayPlant** in the US, **Capital Float** in India, **Market Invoice** and **Platform Black** in the UK, **Aztec Money** in Ireland, **Debitos** in Germany, **Fakturabörsen** in Sweden, and **FinexKap** in France are cloud-based platforms which provide cash or loans for MSME receivables invoices online, which the MSME pays back in instalments or when the invoice is paid.
- *Mobile micro-lenders*: **M-Shwari/Commercial Bank of Africa** and **Equity Bank/Airtel** in Kenya, **Eco Cash/Steward Bank** in Zimbawe, and **Mjara/MFS Africa** in Ghana provide instant small loans based on mobile transactions, savings, and prior loan history, but will no doubt graduate to larger loans in the future.

data and emerging market prowess are **Verde International**, **Zoot**, **First Access**, and **Cignifi** based in the US, **DemystData** in Hong Kong, and **Fractal Analytics** in India. These firms focus on big data and machine learning – in which computers learn from data.

Others, like **Entrepreneurial Finance Lab** (US) and **VisualDNA** (UK) focus on 'small data' to analyse how entrepreneurs think. They build psychometric scoring models to accurately identify high potential entrepreneurs and evaluate risk, conducting assessments using low-cost, automated screening tools. This is pretty exciting.

Earlier this month, Vikram Pandit, former CEO of Citigroup, who has devoted much of his time since leaving Citigroup in 2012 to investing in fintech startups, recently said in an interview: 'For any financial institution, the question should be: "what role are we going to play in this march toward the democratization of finance?"' And the answer is going to determine exactly what their strategy is, how they adopt technologies, and how they position themselves.'

Pandit's comment is a rather different spin on the questions you posed to me, Kosta. But, I think it more directly gets right to the heart of the urgency of digital MSME finance issues for banks. Put simply, I think the message is that banks must step out of their castles – they do not have a choice.

Like you, I am an optimist, and I think with good reason in this case. Here are just a few of the bright spots that inform my belief that the tides are shifting toward real banking transformation ahead:

- A number of banks will cross over to the next frontier of digital innovation and transformation. Some MSME banks – e.g. Bankinter, TEB in Turkey, Standard Bank in Africa, Santander and BBVA in Spain, Aldermore in the UK, Equity Bank in Kenya, and Silicon Valley Bank and Golden Pacific Bancorp in the US – are well along the way already. Others are just starting, and some of course will be casualties of the change.
- On the innovation front, there are also encouraging developments. Wells Fargo in the US and Barclays in the UK are investing in start-up accelerator programmes; Citigroup, Bank of America, and Westpac in Australia are hosting mobile app hackathons to move mobile apps forward; and Bank Leumi in Israel is doing both. First National Bank in South Africa has encouraged innovation by its employees since 2004 and has an annual company-wide innovation contest that rewards employees with prizes of up to $120,000.
- BBVA USA recently acquired Simple and Eastern Bank in the US and launched a new innovation lab by convincing the entire defunct but highly innovative start-up Perkstreet Financial team to join Eastern to run the lab. I think similar moves will occur in the MSME lending space.
- Then there are the new bank start-ups like Fidor in Germany, Brett King's Moven in the US, and SME-focused Holvi in Finland, that were already transformational from the start.

- Alibaba announced in July it was teaming with seven banks in China to offer loans jointly to SMEs using Alibaba's rich online transaction record data as the primary basis for credit decisions. I would expect to see more of this kind of teaming activity in the future.

You wonder if banks might simply cede the MSME lending business to the more well-equipped newcomers? I think this will not happen. It is true that the disrupters have clear lending operating-cost advantages, but three items under the lending cost category – cost to acquire, cost of credit losses, and cost of capital – dwarf cost to serve.

We know conclusively that these lenders have a stratospherically higher cost of capital than their bank competitors, who leverage their nearly free deposits for liquidity. It is only the combination of their low operating costs and banks' low cost of funds that helps create a truly sustainable lower cost structure for digital MSME finance. In my crystal ball, I see more forms of win–win partnering and acquisitions (both ways) alongside continued competitive co-existence.

And so, my dear Kosta, regrettably, we must now draw this exchange about the shape of banks' role in the new era of digital MSME finance (and castles, transistors, big data, the digital universe, and other things in between) to a close. Thank you so much for playing in the sandbox with me!

Best wishes
Lisa

P.S. Like Kosta, I too am not affiliated in any way with any of the mentioned companies but conduct ongoing proprietary research in this space as part of my consulting practice.

Selected websites

Capital Float	www.capitalfloat.com/
Dealstruck	https://www.dealstruck.com/
Funding Circle	https://www.fundingcircle.com/
Go Finance	http://www.gofinanceco.com/about-go/
Innotribe	http://innotribe.com/start-challenge/
Kabbage	https://www.kabbage.com/
Kickstarter	https://www.kickstarter.com/
Kinara Capital	www.kinaracapital.com
Kopo Kopo	http://www.kopokopo.co.ke/
Lenddo	https://www.lenddo.com/
Liwwa	https://www.liwwa.com/
Market Invoice	http://marketinvoice.com/
M-Shwari	http://www.safaricom.co.ke/personal/m-pesa/m-pesa-services-tariffs/m-shwari
Neogrowth Credit	www.neogrowth.in/
Ondeck	https://www.ondeck.com/company/
PPDAI	www.ppdai.com/
QuarterSpot	https://www.quarterspot.com/
Square Capital	https://squareup.com/capital?gclid=CKGA5LO-q8ACFcI7MgodIzoAbA