THE MI OF TOMORROW?[1]

Financial market infrastructures are usually characterised as plumbers rather than entrepreneurs. But the competitive pressure exerted on their users by the new entrants is forcing FMIs to introduce innovations of their own to ensure their users can retain their existing customers. The challenge for FMIs is to work out how to behave more imaginatively without putting their reputation for reliability at risk.

Financial market infrastructures (FMIs) are valued for their solidity. Traditionally, neither their management nor their users nor their regulators have wanted FMIs to put their systemically important work in jeopardy by taking unwarranted risks with operational processes or technology. If they changed at all, it was gradually and incrementally. The timing is also propitious. In the aftermath of the financial crisis, FMIs were freighted by regulators with both enlarged and new responsibilities. As regulatory regimes stabilise, FMIs have more room to adjust their business models and technology platforms to the demands of other audiences. As Simon Eacott, head of innovation and business development at NatWest, points out, after 2007-08 compliance usually came before customers for both FMIs and their users - and regulatory demands were rarely congruent with customer needs, wants or demands.

The conflict between compliance and customers is ceasing to exist

Now Eacott argues that FMIs must cease to view regulatory compliance and customer satisfaction as mutually exclusive alternatives. “Payments have tended as an industry to go for compliance first, and then do the minimum [for customers],” he says. “Increasingly, that cannot be the case. Taking the opportunity, even while we are doing regulatory activity, to develop the customer proposition is going to be increasingly important.” In other words, the users of FMIs would value a blurring of the line between what FMIs do for regulators and what they do for their users and their users’ customers.

Mehdi Manaa, deputy director general at the European Central Bank (ECB), agrees that users and customers of FMIs now want more than low prices, operational stability and an absence of surprises. “We are in a different era, where our users are facing competition, which is pushing them towards innovation,” he says. “Keeping the market infrastructure in a conservative state is not the answer any more. We need to innovate at the level of the infrastructure in order to allow our own participants to be more flexible and efficient and face the competition from new entrants.”

Manaa recognises that this represents a cultural change for FMIs, in which infrastructures must become actors as well as venues. “Competition was once the reserved domain of our participants rather than the infrastructure itself,” he explains. “Now that is less and less the case. There is a need for market infrastructures to be very innovative in order to support, in a better way, their participants, in this new, competitive world. In theory, market infrastructure is very far from the customer experience. We refer to market infrastructure as being the plumbing part. Keeping it invisible is a sign of good functioning at a market infrastructure. But we cannot deliver the plumbing part without thinking what the customer needs – what needs to be achieved in terms of service to the end-user.”

Modernisation by FMIs enables FMI users to innovate

Gerry Gaetz, CEO of Payments Canada, endorses this view. In his opinion, FMIs no longer enjoy their traditional insulation from the need to innovate and compete. Indeed, they are already innovating and, by doing so, making it possible for their users to innovate as well. Instant payments are a case in point. As Gaetz points out, there are now close to 50 instant payments initiatives under way at FMIs around the world, and around 20 high value payment systems are also engaged in major technology overhauls.

“People sometimes talk about market infrastructures as being enablers of innovation,” says Gaetz. “I think that is true, because you are providing services to customers who have end-customers that they are providing services to, who you are enabling through modern technology, platforms, rules and standards. But I think market infrastructures have to innovate themselves. It is not just enabling innovation. It is being better at what we do, which includes new products and services for new customers.”

1 The MI of tomorrow: A panel discussion held at Sibos, Sydney, 24 October 2018. The video of the panel can be watched here: https://www.youtube.com/watch?v=AXTDMweSynY

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Successful innovation by FMIs needs user buy-in

Innovation does proceed in one direction, from FMIs to users. It requires users to support the FMI as well. Inclusive governance was an important lesson of the New Payments Platform (NPP), the instant payments service which went live in Australia earlier this year. The United Kingdom, which has embarked on a complete replacement of both its net batch payments system and its real-time gross-settlement system (RTGS), and a simultaneous consolidation of four separate retail payments infrastructure into a single new entity called pay.uk, has not failed to heed it.

In fact, Simon Eacott thinks the success of pay.uk hinges on a clear vision of the future which engages all parts of the payments industry, including challenger banks and FinTechs as well as the FMIs and their traditional users. The challenge, says Eacott, is to avoid having so many voices clamouring to be heard that nothing gets done. “The market infrastructure needs to make sure it develops a sound and resilient base layer, which will allow the market to innovate on top of it,” he explains. “It is a complicated thing. We are all going to have to think and operate in a very different way. But it is a great opportunity for the UK payments industry to get it right. But there is also a very big risk that, if we do not get it right, we get it badly wrong.”

Gerry Gaetz agrees that an effective governance and engagement model were essential to the programme of change initiated by Payments Canada in its domestic market. Payments Canada even secured a change in the legislation governing retail payments, in order to ensure that both established payments market participants and new entrants were regulated in an equal fashion. According to Gaetz, it suited both sides, since the banks were reassured that the new entrants did not have an unfair advantage, and the new entrants were confident regulated status would ensure they gained equal access to the new infrastructure.

Payments Canada also invested nine months, engaging not just with banks but with end-customers, to help define its vision of a modern payments system. “We had eight needs that we identified - such as easier payment, richer data, faster payments, greater transparency – and we have used them time and time again as we have hit roadblocks,” he says.

But Gaetz also advocates what he calls “non-authority leadership.” This proved essential to persuade all parts of the eco-system to buy into the vision, not because they might otherwise resent being told what to do, but because the leaders of the reform genuinely lacked the power to tell everyone what to do. “You do not have decision-making power over everything,” explains Gaetz. “In fact, sometimes you feel you have decision-making power over nothing. All you can do is align people around a vision, and then a high level road-map, and then a plan. You do it iteratively. You have to find people, not just in your infrastructure but at all your participant organisations, that are willing to do that.”

The obstacles to user buy-in include jurisdictions, investment budgets and the law

Mehdi Manaa notes that, within the European Union (EU), the challenge of selling and implementing a clear and consistent vision, and persuading participants to support it, is complicated by the drive to integrate the capital markets of the member-states. This entails a more complicated governance structure than is necessary in a single nation-state, but it proved its worth in the successful delivery of TARGET2-Securities (T2S), the single securities settlement platform for the euro-zone.

“We have national legacy, national solutions, and national market infrastructures, which are in some cases obsolete, and in most cases not inter-operable with each other,” says Manaa. “A truly integrated European service is not a given at all. We have to unite forces, bring people round the table, and little by little try to overcome the differences and build consensus, not on the minimum common path but on a true future vision of what the market infrastructure should look like. In the current landscape, where innovation is a must, just adjusting at the level of the minimum common agreement, is not enough.”

Calvin Tai, joint chief operating officer at HKEX, adds that, even within a single market, he has found it extremely challenging to persuade all market participants to invest in change. The HKEX systems are 25 years old, and they are used by 600 participants of varying shapes and sizes. Any upgrade, let alone a major overhaul, has major implications for users with multiple agendas which may not match that of the HKEX. It is particularly hard to persuade smaller participants to make the necessary investment, but even the Hong Kong arms of the larger global participants are competing for investment resources with similar demands all over the world. “We need to bring value to the table,” says Tai.

One of the ways in which HKEX is trying to do exactly that is by bringing its own securities settlement timetable into line with that of mainland China. Like most central securities depositories (CSDs), HKEX settles transactions two days after a trade is agreed (T+2). This creates a risk for firms trading the mainland China markets via the Stock Connect link between HKEX and the stock markets in Shanghai and Shenzhen, because the mainland markets achieve securities settlement on T+0 and cash settlement on T+1.

Tai says retaining the revenues from Stock Connect now hinges finding a new technology – which might be distributed ledger technology (DLT), which HKEX is using to build a permissioned network prototype - that can eliminate the operational risk for the custodian banks, executing brokers and fund managers. Whatever technology is eventually chosen, it will achieve its goals by shifting the entire Hong Kong market to settlement on T+1. In the case of Stock Connect, notes Tai, the pressures from customers to change are “very, very strong.”

Tai adds that the ability to respond to customer demands is not always under the control of the FMI. Interest in tokenising assets, for example, cannot be met without a change in the securities laws of Hong Kong. “If we can tokenise assets, for example, the mobility of asset transfer can be much faster, but this is a new concept to legislators,” explains Tai. “How to ensure the legal protection for that kind of tokenisation is sufficient for the relevant stakeholders will be a major challenge."

Mehdi Manaa counters that legislation can drive innovation as well as contain it. The second iteration of the Payment Services Directive (PSD2) of the European Union, for example, deliberately broke the monopoly of the banks over the provision of services to their account-holders. "PSD2 was put in place to favour innovation," says Manaa. "The regulator acted to have more flexibility and better co-operation between banks and non-banks in order to implement the concept of open banking in a way that is agreed by the different market actors and to bring benefits to the end-users of the banks and FinTechs."

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FMIs should engage with and learn from new entrants

PSD2 has certainly opened the European retail markets up to a host of new entrants, including FinTechs. But competition for the customers of the users of FMIs is not confined to FinTechs. Large and established businesses are entering the payments industry. In China, WeChat and Ali-Pay now have hundreds of millions of users. In the United States, Amazon is offering retail accounts, small business loans and merchant services.

"We should not be scared of them," says Simon Eacott. "We should embrace them. They have got a big part to play in all of this. I would prefer to work with them to develop the whole eco-system, for the good of the market and the good of the customer." He reiterates his belief that FMIs, which exist to supply stability, safety, security, resilience and standardisation, are playing the role they are designed to fulfil: providing a solid and trusted infrastructure that innovative companies can use to offer new services to customers.

FMIs should adopt a more imaginative strategy

Gerry Gaetz favours a bolder strategy. He thinks FMIs have much to learn from new entrants such as AliPay, Amazon and WeChat. "A great opportunity for us as market infrastructure providers, operators and change agents in the eco-system is to really think hard about how we create a world where, in some very real way, we are not needed any more," he says. "Whether it is building more of the rules and standards into technology than can be easily run, or whether it is consolidating market infrastructures. That is where there is some efficiency to drive it. Why does a country like Canada need four or five market infrastructures? You could have one. You just have to reimagine it."

Gaetz reckons a more imaginative approach could have profound effects, though he accepts it entails cultural change at FMIs. "It is really important for us, even as infrastructure providers, to not think too much about incremental improvement and really think, `How can we change the game?'" he says. He suggests the securities markets plan not to accelerate settlement timetables from T+2 to T+1, but to think instead about how to make the delivery of securities against payment instantaneous. According to Gaetz, phase three of Project Jasper - the private-public collaborative DLT prototyping project led by the Bank of Canada - has already tested securities settlement on T+0 and proved it can be done.

"We have, at least in concept, proved that you can do it," explains Gaetz. "By tokenising both the money and the securities you can have immediate settlement. Would it not be awesome to put that into play? Sometimes, we do not want to think about incremental. We want to really push the envelope. The work that we did on the first two phases of Project Jasper was all focused on RTGS. What we were trying to do worked, actually, but it had lots of shortcomings, and it probably was not the right solution or tool for the problem. But then you put smart people in a room, and they start pushing the boundaries. Then somebody says, `Well, what if we put securities settlement on the same ledger? Or derivatives settlement on the same ledger?' Pretty soon, you have got something very exciting. That is what market infrastructures have to do more of."

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What FMIs can learn from the experience of change in other countries

Legacy technology (and legacy thinking) represent real barriers to entrepreneurial thinking of this kind. “If you are trying to change things, it can be frustrating, but you have to listen to that,” says Gaetz. “You have to find a way to accommodate, but not always veer to the lowest common denominator.” He recalls that those Canadian institutions which admitted they would not be ready in time to implement proposed changes to legacy retail payments systems in Canada did experience problems, but it was essential to maintain the momentum of the project.

“In the end it came back to bite us a little when we went live,” he says. “The same institutions were the ones that had problems. It was manageable. We were able to fix them. You have to find a compromise, but somebody has to keep pushing. In our context, it ends up being Payments Canada. Somebody has to be pushing an optimistic and aggressive schedule.”

Mehdi Manaa agrees that setting an optimistic timetable and tone is important. This was a lesson that the ECB learned from T2S. It took seven years to move T2S from concept to reality, but the TARGET Instant Payment Settlement (TIPS) programme, which delivers instant payment throughout the euro—zone, moved from concept to go-live in just over two years. The development phase lasted just 15 months.

A crucial ingredient of the success of TIPS, after the initial proposal to the banks, was “TIPS on tour” - a series of roadshows in major cities, at which the ECB explained the project to local market participants. The consolidation of TARGET2 and T2S, and the new collateral management systems operated by the ECB, are also proceeding on aggressive timetables. “We have learned a lot from T2S,” says Manaa. “We built on its important success factor – the governance – to continue to interact with the market to build an infrastructure matching their needs.”

The real driver of change is not FMIs or their users but end-customers

But ultimately even regulators are not the most important drivers of change at FMIs. As Simon Eacott pints out, “what the customer demands and what the customer expects” is now the final arbiter of what happens. It is not surprising, he says, that the most successful innovation of the last five years in retail payments is contactless, tap-and-go payment.

“Retail customers do not wake up in the morning thinking, `I am going to make some payments today,’” he says. “They are going to get coffee from Starbucks, go shopping and get on the Underground, and they want it to just happen. For your average retail customer, payment is a necessary evil for them to be able to conduct their life. If you ask a corporate treasurer if he wants tap-and-go for a $100 million payment, he might have slightly different views. You need to understand your segments, and really put yourself in the shoes of the customer.”

Gerry Gaetz takes this insight further, arguing that customers may eventually make payments not just invisible but unnecessary. “The sharing economy has become a big thing, but most of the sharing economy relies on traditional forms of money,” he says. “I wonder if that will remain the case. It will be technologically very easy to trade other things for services. There are many sites where you can trade goods and services, and you do not have to use fiat money.”

Payments Canada is thinking this idea seriously enough to have started monitoring “leakage” from the formal payments system, so it can pick up early any signs that a major trend is under way. If it happens, the business models of the FMIs will certainly be at risk. “We have all become very comfortable using algorithms in apps,” muses Gaetz. “It makes me wonder whether we are going to see, over time, more of what is a traditional payment leak out into informal exchanges - informal infrastructures for trading value.”

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