



# Building the Bridges of Post-Trade Pragmatism

Across the capital markets industry, the current global pandemic has placed a renewed focus on resilience. Particularly within the post-trade environment, the debate around the levels of automation needed not only for greater process resilience, but also increased efficiency, has been re-energised.

Record volumes may have been good for short-term revenues but have also highlighted the complex and people-intensive processes that compensate for the lack of automation in many areas. But how many organisations have truly delivered on their strategic investment agendas to deliver sustainable and resilient post-trade operating models through greater process standardisation and automation?

Given the regulators' increasing focus on this area and the relentless economic pressures driving the need for greater efficiency, most firms recognise the need for action. But does the sheer size and scope of the challenge limit the ability of 'off the shelf' solutions to deliver impactfully and make it a daunting prospect for the C-suite to address effectively?

In this Financial Markets Insights report from The Realization Group, Mike O'Hara asks **Jonathan May** of Nomura, **Brian Shanahan** of NatWest Markets, Commerzbank's **Simon Hornibrook**, **Dominic Cashman** of TP/ICAP, **John O'Hara** of Taskize, **Matthew Cheung** of ipushpull and **Ali Rutherford** of Ascendant Strategy, what successful strategies organisations can adopt to deliver greater resilience and efficiency across their post-trade domains.















### Introduction

Firms that have undergone digital transformation over the last couple of years are well positioned to be the most resilient during the current pandemic, says **Jonathan May**, Strategic Transformation Lead at Nomura.

"People are starting to understand that transformation to improve efficiency and resilience has to be IT and data-enabled," he says. "This requires having IT and the business unit under the same function, as one group, one team, having one agenda, one strategy and one goal. That really breaks down barriers, and firms need to do more of that."

According to May, resilience and efficiency are strongest where the IT and the business units understand each other, communicate clearly and work together cohesively through problems with one reporting line. But he points out that banks need to take a strategic approach from the start.

"If you identify an area within the firm where you want to do a real organisational transformation and follow a two to five-year plan, you have to bring the teams together at the start of that journey. But it has to work across the whole organisation. I've seen examples of failed transformations across a number of firms because they've kept the IT and business functions separate."



## The need for clear, consistent goals

**Dominic Cashman**, Head of Regulatory Change at TP ICAP, stresses the importance of consistency when setting and communicating goals across the firm.

"C-level leaders need to establish clear, common objectives in a way that crosses the silos," he says. "If you set your operations function the task of doing things cheaper and more efficiently in the medium to long term, set your technology group the task of being more resilient, and task your finance function with reducing overall costs by say 10% in year one, they've effectively all got a different set of priorities and they're all in competition."



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Cashman warns of the dangers of the C-Suite not prioritising and communicating their priorities publicly and clearly. "They run the risk that the Head of IT leaves the CEO's office thinking the priority is resilience, the CFO thinks it's short-term cost reduction, and the Head of Ops thinks it's medium-term efficiency. Eventually, they'll figure out that they've got different objectives. But if it's a clear, consolidated vision that's communicated broadly, then everybody knows where they stand," he says.

**Ali Rutherford**, Managing Director at Ascendant Strategy, agrees that it's all too common for firms to have an independent technology budget that has no correlation to the firm's overall objectives.

"I was talking to a potential client recently who was going through the budget cycle. The technology organisation, whose budget is completely independent from his, had already agreed their figures with the CEO, and to meet their target of a 10% cost reduction, they'd effectively taken out all of the 'change the bank' spend. The CEO then asked this Head of Ops how he was going to match that 10% cost reduction. But he couldn't answer because the only way of being able to reduce his operating costs was through greater automation. And that automation budget – which comes under the technology organisation – had already gone. But that didn't change the cost pressure he found himself under to match that 10%."

# Taking a holistic approach

Rutherford believes that a fundamental rethink at the C-level is needed, with less old-school cost reduction, less trying to skim budgets, and more realising that the post-trade function is the sum of its parts, which is both tech and ops. But he also believes that a pragmatic approach can be taken.

"It's not necessary to completely change the way finance allocations and processes work. The key point is that the C-suite should recognise that tech and ops are so intertwined that they need to be at the table together. Some organisations are doing this functionally, putting tech and ops under the same leadership to try and drive this thinking. But one issue with having a single budget for tech and ops is that the return on investment is likely to be over a multi-year period. So the C-suite needs to look at things more holistically from a timeframe perspective as well as a cross-functional perspective."

Simon Hornibrook, Head of CLM at Commerzbank, agrees that C-level leaders need to think more holistically.

"In order to get to a place where we genuinely transform, both from an efficiency/cost perspective and also from an industry perspective, we need to go back to basics and ask, 'What is it that we are actually trying to do here? What is the raison d'être for a bank? What is our output? What is it that we create?' We are trying to offer X, Y and Z to a specific set of clients, so we need to ask how to best create that end product in the fastest, cheapest, quickest time to market, with the appropriate regulatory oversight and control.



"You need to get to the point where you understand all the components that make up that end product and then focus the whole organisation on streamlining that process," he adds. "If you genuinely committed to that exercise, you would uncover a truckload of redundant processes."



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**Brian Shanahan**, Head of Post Trade Transformation at NatWest Markets, stresses the importance of tying things back to business outcomes.

"An outcome might require some technology work, but it might also require an operational change, or for business processes to evolve," he says, "so success needs to be celebrated when the business outcome is achieved rather than when the technology goes live, for example.

"It's also important to orient around the right business sponsor who can articulate a clear vision for that outcome, before aligning other parts of the organisation – like technology, operations or risk – around those business outcomes. That way, solutions are designed and projects are defined around those outcomes, and delivery can be tracked and managed to ensure success is achieved," he says.

# Practical steps

Assuming that the C-Suite gets the firm to a point where the desired business outcomes have been defined, with the problems identified and the business and technology groups working together towards a common goal, what are the next steps?

For May at Nomura, it's become a personal mission to break free from email as much as possible.

"Unfortunately, even though it's 2020, we're still seeing a ridiculous amount of emails. Fortunately, new apps and new workflow tools like Symphony are enabling people to move away from email a lot more, which is a good thing," he says.

"Most post-trade functions have an input and an output and they need to focus on both," continues May. "From an input perspective, look at the mechanism of how users come in. Are there multiple inputs: email, meetings, telephones, ticketing tools, etc.? If so, you have to consolidate all of those, which means you need good process mapping, similar to what the manufacturing industry's had for years. Consolidate that down to a very clear input and then start innovating around that."

To facilitate this, May is a strong proponent of user interfaces (UIs). "With UIs, users can become more self-sufficient, more active, clearer around what they want to do. And although UIs can be somewhat restrictive, that's actually a good thing because it reduces the level of inefficiency that emails can create. Focusing on UIs for users and APIs for apps is definitely the way to go for any infrastructure. And by following this combined UI and API approach, you can embed a control framework around it with the appropriate restrictions and permissions."



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May adds that when introducing innovation, you need to think like an auditor. "What would you challenge and question around user access? What would you allow them to do to make their lives easier and more efficient, but at the same time still keeping the same risk & control appetite?"

# Balancing innovation with risk and control

This balancing of innovation on one side with risk and control on the other might seem challenging for some firms, but both Shanahan and Cashman believe that innovation can actually help a firm meet its risk and control objectives.

"If anything, innovation works best when you are improving risk and control, particularly when it comes to post-trade," says Shanahan. "The innovation that sticks is where either risk is being reduced, control is being improved or efficiency is being achieved. So I don't see there being a trade-off."

Cashman agrees. "For banks, risk and control are like oxygen," he says. "They're so fundamental to the way that regulated firms work that, if an innovation is going to add to your risk and reduce your control, it's not an innovation you want. If you've got a more innovative way of calculating VaR, for example, but it's less accurate, it's no good. What's the point of it?"

Firms also need to be thorough and rigorous around the scope of any innovation they're introducing, warns Cashman. "There's no point in a fintech coming in and saying, 'Tell me what your problems are, because I can solve them for you.' You have to clearly describe what is it that you want this technology to do, and what are the constraints that it's operating under," he says. "The fintech has to understand what the boundaries are. Otherwise, they may come up with a solution that just doesn't work from a risk and control perspective. If you've written those constraints into the requirements from the outset, then hopefully you won't get into that position."

This does happen all too regularly in the real world, as **Matthew Cheung**, CEO of ipushpull, can testify, citing a painful example of a post-trade pilot with one particular bank. "It didn't really go anywhere because we were seen as a 'golden goose' which would solve every problem. In the end, the pilot failed because there wasn't a decisive singular problem with a specific outcome, it was too broad. There needs to be a specific problem, a specific outcome, a decision maker and a budget for it, otherwise you're just kicking the tyres," he says.

For Cashman, another red flag is where a fintech wants to position itself as a core part of the bank's infrastructure, while still keeping ownership of its IP. "No bank is going to make code that's written by ten guys in a garage and operated on the Cloud a core part of its infrastructure, because what happens if the fintech disappears? You have to have clear parameters and rules of engagement," he says. "Some fintechs do a brilliant job on this, but others are less appreciative of the constraints that regulated firms have."

# Onboarding fintech

From a fintech's perspective, these constraints are very real. The way many banks are set up – with historical, incumbent, legacy and often bureaucratic processes around onboarding – can make it difficult to get innovative and creative solutions through the door, says Cheung.

"Every single bank would say they use the Cloud, but how many of them have really embraced it firm-wide?" he asks. "That stifles innovation, because you can't use all the latest technologies. Small vendors and fintechs are forced to change the way they deliver things, to fit into this older legacy architecture. That can be slow and painful, both for the client and for the vendor."

Some financial institutions are better geared up to deal with fintechs than others, says Cheung. "They'll have an innovation department with some sway and some budget, and the means to lean on business departments, technology departments, procurement, and so on. The banks doing that offer a quicker, more efficient process for smaller fintechs providing solutions for post-trade problems."



Cheung recognises that banks are hindered somewhat by the regulator. "When we gripe about banks being slow moving to the Cloud, it's because they could be facing billions in fines if something goes wrong. So it's understandable why the risk element is somewhat overly skewed into risk aversion," he says.

Cheung also has his own views on the balance between innovation and risk. "On one side, you've got the risks around where your data is sitting, with some client data needing to be on-prem. But on the other side, banks want to offer clients a better service. In order to do that, they need to start improving workflow, particularly around things like email. This is where the risk perception is incorrect. Why is emailing a file attachment considered fine – even if it's sent to the wrong person, or the wrong data is sent to the wrong department, or someone intercepts it through the web – but having a more streamlined future state isn't?" he asks. It's a good question.



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"Of course, there are risk parameters in there, but you need to weigh up, what's the client outcome versus the risk of staying with what you have, and not doing anything? What's the risk of not innovating if you've still got a poor service that is slow and doesn't offer all the functionality that your competitor might offer?" he continues. "But again, that has to come from the C-suite, the mid-level guys can't make those decisions, they have to come from the top."

Rutherford believes that the purge in banking staff in recent years has resulted in a loss of pragmatism, which can stifle innovation.

"The operational and business expertise that used to exist in organisations – either SMEs who understood the business and had a good grip on how the technology infrastructure supports that, or technologists who had been around long enough and implemented enough stuff to have a thorough understanding of how the business works – have largely gone. These were people who were effectively bridges between the business and technology organisation and able to understand what's feasible, what's pragmatic and where you can get the best bang for your buck in terms of investment. So it's not as simple as just having a post-trade innovation officer, because although that will potentially bring technical expertise in fintech solutions, it's still going to end up being micro-focused. People tend to look at their day-to-day job and ask how they can save half an hour here or there instead of looking at the bigger picture," he says.

"We need to find a way to rebuild that bridge of pragmatism," continues Rutherford. "But that requires a degree of expertise to understand things beyond your immediate impact. What happens to this data later in the flow? Where does it go? What happens after I've pressed enter and it's all disappeared, where are the potential impacts of this change?"

## Open source & golden source

Sharing, even with competitors, is necessary for the industry to achieve the innovation and efficiency it craves, says **John O'Hara**, CEO of Taskize and JPMorgan alumnus.

"Internal open source is a pattern that works incredibly well," he says. "share your source code across all your engineers. Celebrate excellence in engineering, encourage sharing, create strong career paths for the technical people like Google and Netflix do. There is no non-engineering title at Netflix, they're all engineers."

O'Hara advocates empowering business users to deliver their own technology. "Write code, not Word documents. I can't run the Word document. That doesn't solve my problem, it just describes my problem. You want to instil a culture of sharing, of excellence, of 'Make something that works right now,' otherwise you won't deliver value at the rate the business demands."





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He sees this as a way for organisations to compound their best practice. "You don't have to reinvent everything over and over again. And as well as being a successful innovation strategy, it's also a successful HR strategy and an easy strategy for the C-suite to see and to deploy. The first results can appear quickly, and it compounds extremely well. That's how you make a world-class technology organisation," he says.

A key factor that drives successful innovation projects in the post-trade space is getting the data right, says Shanahan.

"Where we've been able to get access to good upstream data from the relevant golden sources – whether that's trade data, static data, or customer data – apply smart technology around how that data is managed and then lay functionality over it in high-performing tools, we've had some great results," he says. "We've been able to fundamentally improve how we control and manage the bank's collateral and optimise how much of the bank's liquidity we are using, for instance."

The golden source piece is essential, says Shanahan. "For many of our golden sources, we've assigned data management owners, who ensure the timeliness and quality of that data is completely accurate, so that when other systems consume it, they can trust it, reducing the need for reconciliations or manual adjustments."

The industry has become very aware of the power of good, clean, accurate data, agrees May. "Not just trade data, but all of the reference data that surrounds the trade. Firms understand this. If you want to be able to transform and be resilient in the future, then understanding your data, having control of your data, having good data quality, are essential," he says.

# Industry collaboration

May expects to see further industry collaboration in this regard. "A lot of lessons are being learned in industry forums, where people are presenting on how they've embedded good data governance, good data quality & good data measurement. You're now seeing firms from other industries presenting to the financial industry. Web scale companies like Google explaining their approach to data. That's a good sign that the finance industry is not only understanding the importance of data, but also understanding that there are other industries out there who are a lot further down the road than we are."

He continues, "Good data is always going to be a competitive advantage. But sharing and understanding best practice and how to progress in that space is something the industry can do to help itself."

Industry collaboration can also help in other areas, says Hornibrook, particularly regulation. "Collaboration, when it comes to regulation, means having comfort in the masses and making sure that you are aligned to broadly where the rest of the industry is. That is always defensible. And one of the ways to do that is to be more connected and collaborative around how you are dealing with situations like a Section 166, for example. Taking it one step further that the roundtable events where people just sit round and talk about stuff, to a point where firms are collaborating more on the fly, using some of the technology that is out there now."

O'Hara stresses the importance of greater industry collaboration across the board, and cites examples where a collaborative approach has been successful in the past.

"SWIFT and FIX were triumphs for the industry," he says. "One is a big payment infrastructure, the other is a scrappy standard to connect traders and drive revenue. We need more of these practical, shared solutions, and the selfish co-operation that created them".



O'Hara adds that when banks come together, there needs to be a deeper partnership between competitors. "Commercial drivers come first. If the Silicon Valley approach to Open Source were applied to banking technology, there could be a lot of opportunity for the next generation financial ecosystem," he suggests. "But people need to work together seriously, using venues like FINOS [the Financial Open Source Foundation] to share enabling infrastructure."

O'Hara says that Open Source is not altruism. "Successful Open Source projects are surrounded by commercial ecosystems and backed by investors with risk appetite. The openness attracts contributors, mitigates adoption risk and appeals to clients. When creating an Open Source project, a bank should expect to invest no less than \$1m a year per project; it's not free. The reward is they get to control the outcome, which can have strategic benefits for their core financial business."

Finally, O'Hara sees a challenge for the industry, "Many banks can't stand the idea that competitors could also benefit from investments they make. But the innovation that the industry needs will only happen with multi-year investment through open collaboration. Rather than paying lip service, the banks have to put real money behind it," he urges.

# Measuring success

So how do firms measure success when it comes to greater resilience and efficiency? And what are the key success factors?

One of the more obvious metrics, says May, is STP versus non-STP. "Measuring STP is always a traditional approach for any firm, but it's important to understand not just where the non-STP is, but what's the weighting of those non-STP points? They're the ones that are going to really hurt you, they're the ones where you're going to get that compounded risk. The key to success lies in being able to prioritise those and get them to the front of the list."

May describes how his group has correlated STP to trading volume, so they are able to pinpoint wherever there is a correlation between volume and manual processes. In periods of volatility and high volume, that shows them where they are likely to have breaks and bottlenecks.

"That's helped us prioritise what we've been fixing and automating," he says. "And over the last six months, we've massively taken out all of those volatile points in the data chain. Where we've had high volumes, we haven't seen the problems and the bottlenecks that we would have seen previously."

Shanahan points out that resilience and efficiency are quite different things, so need to be measured differently. "Resilience is the ability to withstand shocks and evolve and grow with change. For example, when COVID first hit in March, we saw a dramatic increase in volumes across our global trading business. That was the ultimate test in resilience: external industry changes, changes to customer behaviour, and elevated stress on the systems. The proof of resilience was the ability to not just be able to withstand that but to perform well through it," he says.



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**Brian Shanahan, NatWest Markets** 

Efficiency is slightly different, says Shanahan. "That's more about measuring how we are improving through time, in terms of how we're managing and optimising our capital, revenues, costs and balance sheet through time. For that, there is always hard data, and the data tells a story."



Rutherford suggests that success factors around resilience and efficiency need a range of KPIs that are probably different from the current ones typically in use. "Existing KPIs tend to be driven by key risk indicators, or things that might show there's a risk in the process, rather than anything around process optimisation," he says. "That means you need a different set of measurement points rather than starting from your existing ones, or being constrained by the existing data that might be available to you. You need to be thinking about the things that should be measured, to really show that resiliency. For example, what actually is your level of automation for a given process? Think about how you can measure it. What are some of the options? What are some of the different ways to be able to track it?"

Rutherford explains how metric generation can be incorporated into the solution. "Whilst you might not have an existing metric that gives you data to be comparative, what you implement generates metrics that allow you to measure ongoing improvement and effectively establish a baseline of the new process that you can approximately compare," he suggests. "Designing in KPI generation is a very sensible part of your design process, so if you haven't got clear metrics that can show the change, then think about that as part of your requirement when putting the new thing in."



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#### Conclusion

It's clear that one of the key elements in ensuring greater resilience and efficiency in post-trade is transformation from manual to more automated processes. And in order to effect meaningful transformation, the business operations and technology groups need to be closely aligned, with consistent goals.

It's also clear that desired outcomes need to be clear and measurable, and innovation needs to be introduced in non-disruptive ways. Industry collaboration can help, but it seems there are still significant challenges around making that happen meaningfully.

The post-trade environment is complex, so change shouldn't be too simplified, says Rutherford, "Even something that looks small has the potential complexity to blow up quite badly and be unsuccessful. Your innovation needs to look at manual or messy processes, rather than big core systems. You're looking at the spreadsheets, the chat, the phone calls, the email, that sort of stuff."

Having said this, Rutherford adds that you also need to look at the big picture. "Make sure that you're automating at the right level, not at the microlevel," he says. "Because if it's just a piece of data that's been passed from A to B to C to D to E, and all you do is automate those four steps, then actually you could have just automated A to E. That's part of the problem. Bad process versus needless process."

The last word goes to Cashman. "The key thing is enlightened leadership, business leaders who have the confidence and the freedom to take financial risk on innovation. Being prepared to spend money on things without a certain return. If you don't have enlightened leaders who are prepared to take a chance on things, you won't be able to innovate. If every investment has to go through a cost committee that says no unless the return on investment is guaranteed, you will not be able to innovate," he concludes.





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