IIF Podcast with Starling and the Monetary Authority of Singapore

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Conan French: Welcome to FRT, the IIF podcast at the intersection of Finance Regulation and Technology. I'm Conan French, Director for Digital Finance at the IIF, and in today's episode we'll be exploring how conduct and culture have become an important area of focus for operational and financial risk. Institutional values translate into actions and, when culture and conduct go wrong, results can be disastrous for institutions, shareholder value and the public sector, which has to resolve the situation. New technology and behavioral science are helping to bring new tools to the effort and some leading institutions are working to get ahead of the curve and focus on prevention rather than cleanup. In this episode of FRT, we're going to hear from two institutions that are blazing the trail. The Monetary Authority of Singapore (MAS) is definitely leading the way in supervising organizational culture at the institutions that it oversees. And we're also going to hear insights from a thought leader who's helping to drive proactive change. Ho Hern Shin is the Deputy Managing Director for Financial Supervision at the Monetary Authority of Singapore. Welcome Hern Shin.


Ho Hern Shin

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Ho Hern Shin: Hi. Good morning, Conan. Thanks for having me.

Conan French: And Stephen Scott is founder and CEO of Starling, as well as the author of the *Compendium*, which is a major piece of work on conduct and culture risk in the banking sector.

Stephen Scott: Nice to be here, Conan. Thanks for having me.

Conan French: The first theme that I wanted us to dig into a little bit was why conduct and culture matters. I shared some thoughts, but Hern Shin, as you think about it, why is sound organizational culture a matter of supervisory significance?

Ho Hern Shin: Thanks Conan for the question. Financial sector supervisors are in the business of strengthening safety and soundness and fair treatment of customers in our regulated institutions. Increasingly, it is recognized that fostering strong organizational culture within regulated institutions can help us to do that well. Organizational culture is that intangible thing that aligns each employee's attitudes and behaviors to corporate values. We often say that employees are guided by policies, processes, rules within an organization. That is true, but it's not the whole truth. More than abiding by policies and rules, employees often choose to do what is acceptable in the eyes of their bosses and their colleagues. They do this when interpreting rules and in situations where there are no prescribed rules, and this can happen since rules cannot cover each and every situation. They will ask, "What will my boss and colleagues expect or think about this thing I'm doing? What can I do to get me recognized, appreciated, or even promoted?" That is organizational culture at work.

So sound organizational culture will align employee behaviors to positive corporate values. Be it treating customers fairly or managing risk prudently, it strengthens the consistency and quality of how financial institutions execute their policies and processes, and how they make decisions on a daily basis at all levels. This helps to minimize misconduct and internal control failures even when the supervisor is not watching. So that's why it's so important for us.

Conan French: And that was a great introduction for us. As you think about why conduct and culture matter and what you see in the global trends around the world, what were the developments that had you start the *Compendium* and what do you see as those important developments?

Stephen Scott: Thanks for that Conan. I was thinking about this the other day. We're busy writing our fifth issue of the *Compendium* currently and I stopped to ask myself, "When did this madness begin and why did I do it?" And what I recall was that I was at one of the great conferences that Bill Dudley had put together at the New York Fed and I was speaking with someone from what was then known as the UK's Banking Standards Board. We were commenting on what Hern Shin just said, that regulators were starting to talk about culture as a thing that required attention from supervisors and something that management should attend to.

And we were hearing different comments in this direction from different places around the world, and I turned to this fellow with the BSB and I said, "You guys should really put together some sort of comprehensive digest of what's happening in all the different jurisdictions so that there's a reference that we could all go to and see what the emerging trends are and any key points of difference." And he said, "Yeah, we just wouldn't be able to do that, you should do it." So I went ahead and did it, and here we are.

But the trends are very much so as Hern Shin outlined. I think, if I could get lofty for a moment, there's been a little bit of a failure in management science. A lot of the presumptions of what makes people do what they do are based on notions of carrots and sticks — people are incentivized by money and that's sort of it. And behavioral science teaches us that that's just not true. People are motivated by belonging and, as Hern Shin brought out, they'll do what they see their peers doing in order to remain in positive light in the eyes of the peers that they care about most and rely upon most. A lack of understanding of that really has organizations trying to manage culture and conduct related issues with one hand tied behind their back.

Stephen Scott

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Conan French: Hern Shin, what is the MAS doing to examine organizational culture? What can you tell us about your approach?

Ho Hern Shin: Well, we've been intensifying our efforts for certain, and we have a three-pronged approach. The first prong approach in supervising organizational culture is what we call promote and cultivate. MAS promotes awareness and cultivates commitment within financial institutions to build strong organizational culture. This first step recognizes that building strong organizational culture is something that financial institutions need to own. MAS engages in regular dialogues with financial institutions, their boards and senior management to discuss the benefits of good culture to get the mind share. We also lean in to listen to their operational challenges, and then we try to bring the industry together to facilitate sharing of good practices so that good solutions to common problems can be tackled much more quickly. So that's the first pillar, build that ownership and promote and cultivate.

The second prong is to monitor and assess. So having secured commitment to build sound organizational culture, MAS as supervisor must monitor progress and nudge improvements. Monitoring is carried out as part of our offsite supervision and our onsite inspections. We assess both the hardware, things like frameworks, policies, procedures, they still have a role to play, as well as the software, such as tone from the top, leadership attitudes. We evaluate whether a financial institution's organizational culture incentivizes ethical behaviors and responsible risk taking. We also look out for potential red flags, such as a disempowered risk control function. Our supervisory techniques that are involved are rather different from what our inspectors are ordinarily accustomed to. So, for example, great reliance is placed on in-depth conversations and interviews with bank employees on topics such as their perceptions of front office culture, tone from the top in terms of organizational values, and their perceptions of desired employee behavior. Hence, aside from iteratively improving our methodology of assessing organizational culture, we are also deepening our supervisor's capabilities of performing these assessments.

The third and final prong is to enforce and deter. People often said, "when there's a consequence that gets acted upon." MAS takes supervisory or enforcement actions against financial institutions and individuals where there's been lapses in risk management, misconduct, regulatory breaches or where offenses have occurred. We can take a variety of actions ranging from just issuing a warning to closing a financial institution, levying civil penalties or referring it to our attorney generals chambers for criminal prosecution. Of course, the penalties will have to be commensurate with the severity and nature of the misconduct and be sufficiently tough to achieve effective deterrence.

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While the three prongs are mutually reinforcing and important, our predominant focus now is on the first two prongs, because cultivating and monitoring industry norms of desired behavior are more preemptive towards minimizing the likelihood of serious lapses in the industry.

Conan French: Well an ounce of prevention outweighs a pound of cure is a phrase that you sometimes hear and I think that focuses us on an important shift in the industry. Stephen, I was wondering, as you look around at global trends, what does your *Compendium* identify as emerging best practices in this regard?

Stephen Scott: Well, I would make a distinction between emerging best practices and emerging best principles. I don't know that all the practices are fully established yet, but I think the principles are now firmly established and I think Hern Shin did a great job of outlining them. Just to pick up on something Hern Shin had commented on, she mentioned the tone from the top as being important and we often hear that from bank regulators. However, it was the Monetary Authority of Singapore that made the very clever quip a few years back that, as important as the tone from the top, is the echo from the bottom. And that becomes challenging. How do you test for the echo from the bottom and how do you do that at scale? How do you do it in a way that's consistent across institutions within a given jurisdiction, so as to permit for some sort of horizontal peer review capability? And I think that the industry is still trying to work that out.

Hern Shin had mentioned doing in-depth interviews and her bank examiners. When they look into culture and conduct, they are asked to do things that are not a part of their normal bank examination work. Different regulators are experimenting with different approaches. Talking to people seems pretty sensible, but problem with that is that you can't do it at scale and you can't do it in real time. A third problem is that people tell you what they think you want to hear rather than what they actually believe. There's an effort underway among many regulators now to sort of marry up this shift in principles to a shift in capabilities that technology has made possible. Here again, the Monetary Authority has been a real leader in pushing for the development of what's called SupTech and RegTech — supervisory technology and regulatory technology. But I think we're in the very early days of seeing those sorts of tools adopted and largely because they're still not very well understood, as they're new technologies. There's an opportunity here for leadership and MAS has certainly shown that.

Conan French: Hern Shin, what are some examples of this SupTech and the different solutions that could be employed in conduct supervision?

Ho Hern Shin: Thanks for asking that question because, as Stephen alluded to, we cannot undertake this work without the help of technology. Indeed, we are fully aware of the problem of people telling you what they think you want to hear. Solving this problem is really about going down to the masses, taking a very large sample and then lobbing off the extremes. In order to do this, you need technology to help you. One of the technologies that we've been trying to experiment with is automatic speech recognition. MAS is exploring the use of this technology to automatically transcribe the many, many interviews and conversations that we have with financial institution staff. This has the potential to significantly improve the efficiency of our inspection work that places such heavy, and it's really inordinately heavy, reliance on interviews. It will help us identify much more quickly common themes and patterns that may be indicative of cultural issues.

There are two or three other examples I thought that are worth sharing. The second example would be the use of natural language processing. To analyze misconduct reports submitted by financial institutions, MAS uses a combination of natural language processing techniques such as topic modeling, sentiment analysis and regular expressions to tease out various misconduct modus operandi, and to monitor these for spikes and trends of concern.

A third example is the use of logistic regression models. We've had some early success in developing a simple multifactor logistic regression model to score the likelihood of a representative, and by representative I mean someone who sells and provides advice on investment products. The model scores the likelihood of a representative committing a misconduct over a specified time period. The model draws on supervisors input, predictive factors such as working experience and misconduct history of a representative. It has also tested various other factors that MAS thought were relevant. The scores are now used by supervisors to identify higher risk transactions for samples for scrutiny.

Another example would be the use of augmented intelligence systems. For market manipulation cases, MAS often appoints industry experts to obtain a specialist assessment of the trading behavior of the suspects. However, it can take some time before the experts come back with a complete analysis and provide an opinion. So we developed a tool in-house in 2018, using an augmented intelligence system, and it performs automated trade analysis and assesses the likelihood of certain types of market manipulation. It is used alongside other analytical and investigative tools in the prioritization of inquiries and investigations as well as internal case assessment. So you can see that the use of technology has really helped us in a wide range of areas from just process efficiency into the areas of predictive analytics. It is still early in the game as Stephen has suggested, but we really hope to make more advancements in this area over time.

Conan French: I'm sure you will, and that's a very impressive start of how to deal with that scale and real time problem. It also points to what you had mentioned at the beginning of trying to move towards prevention and providing tools and supervision that really helps enforce that prevention. Stephen, I know as we think about behavioral science and these new technology tools, there are a lot of exciting developments and I was wondering if you've seen any others that you might point us to.

Stephen Scott: I think Hern Shin pointed out a really interesting distinction there between SupTech and RegTech. Natural language processing and sentiment analysis software have come a long way. It's pretty well understood and a lot of it is really good. I think, within firms and their supervisors, there's been a long history now of using transactions data to look for anomalies within the data that may suggest some sort of squirrelly transactions so that you can go in and have a closer look. Regulators can do that and supervisors can do that. But, when we go into firms and suggest that we might be able to listen in on conversations and do real time language analysis, people's hair stands up on the back of their neck. It sounds far too much like Big Brother. Again, if your supervisor comes in and compels you to produce that data, you really don't have a choice.

But, when we went in and talked to firms about what they want to do in this regard, the privacy sensitivity issues loomed large. There's a fear of creating poor morale, suggesting to employees that you don't trust them and so we were a little stymied when we first learned that. What we did at our company is we said, "Well, what about non-sensitive data that firms collect? Metadata, electronic communications metadata, things like to, from, CC, BCC, time? Can we find patterns in that non-sensitive data? And that can be anonymized, so we're not sure which particular individual it attaches to by name — we only know it's employee one, two, three. Can we find signals there that correlate with predictive reliability, to the kinds of outcomes that management is trying to solve for and that regulators are trying to inquire into?" And we've developed an ability to do that, but we're not alone.

What about non-sensitive data that firms collect? Can we find signals there that correlate with predictive reliability, to the kinds of outcomes that management is trying to solve for and that regulators are trying to inquire into?
STEPHEN SCOTT

There has been a number of really interesting efforts. Some were done at Stanford, for example, where again they looked at the language, but they scrambled it. So the language was just gobbledygook, and it couldn't be read in any sort of lexical fashion. What they looked for was patterns of language use, and they found patterns that were associated, with predictive reliability to outcomes like retention, or people being expelled from an organization, or people being disengaged from the organization and feeling hostile towards the organization, which creates a whole new lens for looking at insider threat detection. There's a lot of exciting work that's being done out there using non-sensitive data so that firms can use that in an internal governance capacity and supplement what their regulators are receiving using different SupTech capabilities.

Ho Hern Shin: Can I just interject on that? Stephen, thank you so much for sharing that, and that's really encouraging for me as a supervisor to hear what firms are trying to do in this area. Because if you look at the way that we supervise in culture and conduct, it's way more intrusive than what we would do for any other area of risk. One of the reasons why MAS and other leading supervisors in this area do this is that they are quite new and emerging areas. When we try to broach the topic of, "How do you measure good conduct? How do you foster good conduct and good organizational culture within your organization?" Firms very often ask us, "How do you define culture? How do you measure culture?" We found ourselves stuck in that level of conversation.

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So, by taking the bulls by the horn and going in using insights from behavioral science and techniques from psychology, we hope to demonstrate to financial institutions that it is possible to define this, to measure this and to help make improvements in this area.

So over time, indeed, the hope is that supervisors will increasingly shift the burden of measurement and monitoring to financial institutions. And we, over time, would pick up that supervisory oversight as we ordinarily do. So thank you very much for sharing that.

Stephen Scott: It's a pleasure. And I think you've just outlined one of the central concerns that's coming out in our 2022 *Compendium*. And that is, for financial risks, we can calculate a VaR, right? We can calculate Value at Risk. Thirty years ago, if you asked a firm, "What's your Value at Risk?" They'd say, "Give me a month and I'll come back and give you a number." But, now, Value at Risk is calculated in real time. There's no equivalent for non-financial risk. I think what we're hearing is that regulators and different jurisdictions are experimenting with different ways to put quantitative data driven metrics to these qualitative behavioral and cultural challenges. It's really exciting. It's a whole new space. We like to think that we're a pioneer in that space, which is terrifically interesting. We've received tremendous interest from regulators all across the globe, in thinking about "How can we crack this nut? How can we operate at scale to assess non-financial risk proactively in real time?" It's a really interesting challenge to work on.

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Conan French: And as you move forward in that challenge and work through some of the issues that you've shared today, one of the observations at least that I have is this development of technology might create a common tool for employees, institutions, supervisors and regulators, to all have a sense of where the conduct and culture sort of lines and encouragements are. And so there can be a green, red, yellow light, or whatever a simplified dashboard has, but that it's really a common shared tool and so there's more comfort with the individual staff members and others that they're not just being spied on from on high. Rather, they really have a shared technology tool that's helping them understand the behavior, understand the culture and conduct, and really guide towards that good productive conduct that I think everybody is trying to proactively encourage.

So that's my hope and view as I watch this space evolve in RegTech, SupTech and new technology tools. What are some of the other things that you see as we look forward in the coming years and how supervisors, solution providers, firms and others can create these improvements going forward. Stephen, maybe start off with you quickly.

Stephen Scott: Yeah. I just had this conversation with your chairman at the IIF, Axel Weber, and he made the observation that firms can experiment with ways to approach this, but they need to do something that their regulators will find credible and compelling. They can't experiment on this absent having input from the regulators. And, to your point, if it's going to be an industry standard set of metrics, then you need the technology companies involved. It's not for a firm like ours to figure this out on our own, nor will the regulators figure it out on their own. And, of course, they're supervising firms that operate in multiple jurisdictions. Maybe they're satisfying the concerns among regulators at the Central Bank of the Philippines, but they're not satisfying the concerns for MAS. So there needs to be this ecosystemic approach to this, and organizations like the IIF are a great place for that conversation to be had.

Conan French: Thank you, Stephen. And Hern Shin, closing thoughts as you think about the future of this space and the trajectory that we're on.

Ho Hern Shin: Thank you. Maybe just to back up, I really think culture and conduct will continue to be an area of supervisory focus for regulators. We're in a period of significant risk and uncertainty. Over the past two years, financial institutions have had to manage the economic fallout and operational constraints associated with the COVID pandemic. Remote working arrangements and finding ways to safely deliver financial services are examples. When a significant portion of your staff are working from home had to be navigated in a matter of days. A balancing between extending credits, supporting customers and maintaining the health of your portfolios, when the end is not in sight, was another challenge. Come this year, when we thought perhaps with vaccinations we might get onto a more even keel, the Russia-Ukraine invasion presented yet another set of challenges. Volatility in commodities prices are increasing risks of stagflation. All of this exists against the backdrop of a fast escalating climate crisis, which demands financial institutions to adopt more sustainable practices and to help their customers decarbonize.

Sound organizational culture will be all the more important and needed in times like these to help financial institutions make sound day-to-day decisions, manage their risk well and build brand reputation, confidence and trust as they navigate the adaptations and changes needed in such an environment.

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Fostering sound organizational culture has also increased in complexity. Under the current remote hybrid work arrangements, which some organizations are going to extend indefinitely, it is harder for managers to model the desired codes of ethical behavior, corporate values, and code of conduct. It is also challenging to onboard new employees into organizational culture when they spend limited face time with their peers and with their supervisors. The long-term adverse impact of remote working on an organization's culture, team dynamic, creativity and overall ability to innovate thus bears close watching. So firms and supervisors must stay keenly aware of some of these challenges as they try to strengthen organizational culture. I will be the first to say, we do not have all the answers. We never had them, but, all the more, that means we have to work closely together to identify common pitfalls and challenges and share solutions as quickly as possible.

Conan French: Well Hern Shin, that was a wonderful job of putting it in context. And again, how these new tools can help in a new distributed environment as conduct and culture is more important than ever, but management techniques and structures and oversight has all changed. I think the evolution will continue forward, and so these new tools are important. Stephen, any final thoughts as we close out our session here?

Stephen Scott: Well, I think Hern Shin did a great job of wrapping up the importance of this. I'll share with you in mid-May we'll release our 2022 *Compendium*. And probably the top takeaway is that the integrity of the financial system around organizational culture, the actions of its people and how they impact all the stakeholders of the financial system has gone from being something that only prudential regulators must think about, and it's now moved to being a national security consideration. The sanctions regime that's been put in place vis-a-vis the war in Ukraine makes it mandatory that whole populations can count on their financial sector to play the right role. If the financial institutions don't have good organizational culture, and that leads to poor conduct in this context, it's now a national security issue.

Conan French: That is a good and serious final thought here. And thank you very much for joining us. Thank you Stephen.

Stephen Scott: Thank you Conan.

Conan French: And thank you Hern Shin. We appreciate your time.

Ho Hern Shin: Thank you. It's been pleasure.

Conan French: And thank you to our listeners for tuning in for this episode of FRT. You can find all of our episodes on the IIF website or wherever you find your podcasts.

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