Q&A Interview: SWIFT CIO Michael Fish reviews Sibos 2013 and technology trends

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*The chief information officer (**CIO) at SWIFT, Michael Fish**, acts as the global head of IT, operations and security for the collective, which handles messaging flows and transaction volumes for global cross-border payments, securities and increasingly compliance traffic. In this Q&A interview with bobsguide's Neil Ainger, he shares his views about the **Sibos 2013** trade show just ended in Dubai, UAE, how he feels the**Technology Forum** went, and what technology **trends** and issues, such as the cloud and cyber-security, will be impacting bank CIOs, chief technology officers (CTOs) and infrastructure heads throughout the year ahead.*

Michael Fish is the chief information officer (CIO) at SWIFT.

Technology, new product announcements, messaging standardisation like the move towards ISO 20022 XML,**innovation**, the **compliance** burden, banking and payments trends, **market infrastructure** moves and discussions with peers were all part of the experience for attendees at the recent Sibos 2013 trade show in Dubai, UAE, on 16-19 September. But at such a wide-ranging show there are inevitably some aspects of the SWIFT-organised annual event that won't be of interest to technologists. That is why SWIFT created the **Technology Forum** a couple of years ago to provide a conference stream for operations people to discuss best practice and learn from their peers, while also giving business people from the banking, compliance and other departments the chance to talk to technologists about what they can do for the business and vice versa.

Michael Fish, the chief information officer (CIO) at SWIFT and one of the driving forces behind the Technology Forum at Sibos, talks about how he feels it went and the general 'technology take-aways' from the show.

Question (Q1 bobsguide): What was the most interesting technology-related session for you at Sibos 2013?

Answer (A Michael Fish, SWIFT CIO): I hate to play favourites here, because that will get me in trouble with all the other Sibos 2013 sessions that I don't pick! To be honest I thought all the Technology Forum sessions went very well, especially for a relatively new addition to the show. According to the session ratings which I have just reviewed, the attendees seem to have enjoyed the Technology Forum too.

That said, I'll throw caution to the wind and answer your question anyway. The two sessions in the **Technology Forum** that really stood out for me personally were the 'big data session' and the CIO technology keynote, which featured Stephan Müller, chief information officer at Commerzbank and Suresh Kumar, CIO, at BNY Mellon. Both of them provided a fascinating discussion about how much technology budget goes on operationally 'keeping the lights on' and what is left for innovation. The issues of training the next generation of technologists, handling legacy and diverse siloed infrastructures, plus new regulatory reporting and risk

obligations - all the while under the threat of cyber-attacks - were also debated. The keynote resonated with me because as a global CIO myself, I found it fascinating to hear the views of two well-respected global CIOs on a wide-ranging set of issues that were all quite familiar and relevant to me. It was the perfect opportunity to compare notes and calibrate my thinking on these issues.

I found the big data session enlightening for a completely different reason. Big data is not my forte, so attending the session was more of a learning opportunity for me. I thought the panellists did a good job of conducting a critical exposition of the topic, rather than simply feeding the big data hype machine.

Q2 (i) (bobsguide): What were the respective aims of the Sibos 2013 Technology Forum and the Innotribe conference streams?

A (Michael Fish, SWIFT CIO): In my view, **Innotribe** and the Technology Forum have completely different objectives. Innotribe focuses on "head in the clouds" idea generation and exploration, whereas the Technology Forum focuses on "feet on the ground" execution [*the **winners** of the **Innotribe Challenge** - Klick Ex and Waratek - can be seen in the **Day 4 bobsguide Sibos show report** -Ed.*]

(ii) (bobsguide): Did you think the Tech Forum and Innotribe were compatible and complementary or were the CIOs and operations-focused speakers at the Forum more burdened with regulatory and legacy concerns than the Innotribe speakers who offered disruptive technologies but perhaps from an easier starting point?

A (Michael Fish, SWIFT CIO): Innotribe sessions offer an opportunity for Sibos participants to explore disruptive technology topics by providing a sandbox to facilitate discussions. Like kids in a sandbox, a small group of adults can work together to construct an imaginary world, largely unencumbered by the norms and rules and constraints that govern life in the real world. The sandbox provides a safe and conducive environment for exploring alternative visions of the future, which clearly is a useful thing to do from time-to-time. There is quite some passion and energy in the sandbox sessions because it is fun and uplifting to conceive of a better tomorrow.

The challenge of course is when the participants step out of the sandbox, they often find that what sounded great in the sandbox will not enjoy a fairy-tale ending in the real world. The real world introduces many issues, risks, and barriers that must be overcome in order to translate a concept into reality. This is where the Technology Forum comes in. Senior IT practitioners across the industry struggle with the same high-level, pressing problems in the hottest technology areas, such as cloud, big data, cyber security, and mobile – all of which were discussed at the Technology Forum. The Forum provides a discussion platform for comparing notes on these pressing, real-world issues that we face in the here and now.

Q3 (bobsguide): What was the most interesting technology-related issue at Sibos 2013 for you? For instance, many of the respondents to the instant bobsguide Vox Pop at the end of the show identified collaborative shared services and the mutualised cost model as a key theme: do you agree or was there another tech trend that caught your eye such as the rise of the mobile channel, cloud, big data, etc?

A (Michael Fish, SWIFT CIO): Cyber-security seemed to dominate my schedule at this year's Sibos. Cloud computing, the mobile channel and other tech subjects were also debated in the Forum but for me personally, cyber-security was a big issue at Sibos 2013. [*this is not surprising in the wake of Edward **Snowden's allegations of NSA monitoring of SWIFT** data; the **$6bn Liberty Reserve money laundering scam**; rise of Ripple, **Bitcoin** and other non-traditional digital currencies; and attacks like the recent one where a **Barclays branch IT system** was **taken over by criminals** -Ed].*

Cyber-security was discussed in many conference seasons at Sibos 2013, not just in the Technology Forum. I also spoke to several hundred SWIFT customers about cyber-security in various group and individual meetings. It has become a universal source of concern for financial services companies, and Sibos provided a convenient and timely opportunity to compare notes.

Q4 (bobsguide): What technology trend do you think will most impact the financial services world from now until the next Sibos in Boston in 2014? – i.e. crowd sourcing, social media, in-memory computing, etc?

A (Michael Fish, SWIFT CIO): Many technology trends will compete for this distinction over the course of the next year. Some of the trends you mention, such as crowd sourcing, may not be mainstream enough yet to achieve major impact. Others, such as in-memory computing, may be too new. Then there are the stalwart trends of recent years – such as cloud computing, big data, and mobile – I believe the impact of each of these will continue to grow.

But what technology trend will be most impactful in the coming year, and how can that be measured? One objective indicator would be to look at where financial services companies will be increasing their IT expenditures the most. Based on forecasts we heard from senior technologists during Sibos 2013, it seems that technologies related to cyber-security may be the winner. Even in this era of tight IT budgets, many companies are anticipating double-digit percentage increases in their cyber defence budgets. Part of the increase will be for further preventive security controls, but the investment emphasis now seems to be shifting toward technologies that would help to detect, isolate, and manage malware when it inevitably penetrates security barriers.

Q5 (bobsguide): How would you advise a bank CIO struggling to meet onerous regulatory, cyber-security and innovation demands on a restricted tech budget that is increasingly devoted to compliance and operationally 'keeping the lights on', to proceed? Is there a model, structure or idea that you think can help FS technologists cope with their increasingly difficult job?

A (Michael Fish, SWIFT CIO): My advice would not be directed to the CIO, but rather to the chief executive officer (CEO) and the Board. I would tell them that technology is central to your business and critical to your success. If you don't already have a dynamite CIO, you'd better go out and get one. You need a CIO with the judgement and integrity to make the right priority calls and investment trade-off decisions. You need a CIO with the stature to convince powerful stakeholders what level of technology investment is right for the business. You need a CIO with the discipline to drive excellence in execution. And if you get a person like that, you would be very wise to heed their advice and support them. That way, you can sleep well at night knowing that the foundation of your enterprise is sound.

Q6 (bobsguide): What about SWIFT's own technology requirements and plans? In recent times you've launched the cloud-based Alliance Lite 2 connectivity platform, sanctions screening platform and announced a Know Your Customer (KYC) platform. What is next on the horizon for you?

A (Michael Fish, SWIFT CIO): Operational excellence will always be job number one for us, and that is my key focus. We define this as building and running SWIFT services to the highest security and reliability standards. Toward this end, most of our technology investment still goes to renewing and strengthening our core services. This will never change.

Our broader strategy is to leverage these core strengths in ways that allow us to selectively expand into closely adjacent markets in the financial services cooperative space. One key strategic thrust over the past few years has been to help customers with their connectivity and integration needs – Alliance Lite2, Alliance Remote Gateway, Alliance Integrator, and Alliance Message Hub are all continuing initiatives in this vein. The next big area we see on the horizon is to help our customers with their regulatory compliance challenges. Our **sanctions screening**, sanctions testing, and know your customer (KYC) offerings are examples in this space. This will keep us plenty busy. [*the move towards collaborative shared platforms was supported by Samir Assaf, group MD and chief executive of global banking and markets at HSBC, during his* **opening plenary keynote address** *at Sibos 2013, when he said "if there is no proprietary value in it, we should use a utility platform", and* **collaboration** *was one of the* **key trends at Sibos 2013** *-Ed*].

Q7 (bobsguide): What has been the most satisfying technology project you have undertaken for SWIFT and what are the security and operational challenges of being a technologist at such a global, diverse organisation, which handles so much of the globe's payments, securities and other messaging traffic?

A (Michael Fish, SWIFT CIO): Our Distributed Architecture (DA) programme is probably my most satisfying project, which I undertook soon after becoming CIO at SWIFT in 2006. I previously worked as head of IT development after joining SWIFT in 1999 from the telco Ameritech firm.

The Distributed Architecture programme was my first big test as CIO. My team and I drove the formulation of DA in 2006 to address franchise risks in the areas of security, reliability, and data protection. DA is a massive SWIFT multi-year technology project that involves building operating centres and re-architecting our core messaging services. It is easily the biggest single project we've done in the last 20 years, if not ever. We are almost done now and the execution by our technology teams has been flawless.

Q8 (bobsguide): Please provide our readers with a brief overview of your technology career background?

A (Michael Fish, SWIFT CIO): I joined SWIFT in 1999 as head of IT development from the telco Ameritech firm, which was one of the seven regional US Bell operating companies spun out of the breakup of AT&T in the mid-80s. I had worked in the telecom industry for more than a decade across various network engineering and IT management positions, before joining SWIFT and rose to become CIO in 2006. I hold university degrees in engineering and business, and as SWIFT's CIO I also serve as the global head of IT, technology operations and security.

Q9 (i) (bobsguide): What technology excites you and please comment on what you think has been the most profound technology change during your time in the industry (e.g. the web, mobile, etc)?
(ii) What will be the most disruptive technology of the future in your opinion?

A (Michael Fish, SWIFT CIO): When I was in engineering school back in the late 1970's, I made an off-handed comment to a friend that one day we would all have communicators and computers like they had in the TV show '*Star Trek*'. It wasn't a prediction, just an idle wish. I never really thought it would happen because these devices seemed so futuristic at the time.

A few years ago at a class reunion, my friend reminded me of the "prediction" I had made long ago. With the benefit of hindsight, he chastised my prediction as being too conservative. It is truly astonishing to me that the mobile, personal computer, and internet capabilities of today far exceed even my outlandish speculation of some 30 years ago.

As breath-taking as the technical advancements in mobile and personal computing have been, the more profound change has come from the application of these technologies to transform businesses. In banking, just think of how the branch-based 'brick-and-mortar' world of 30 years ago has given way to the internet and mobile channels of today. Managing relationships with customers has completely changed, as have attendant business models. Clearly, we live in an age of disruptive change driven by clever business people harnessing technology advancements.

Having been humbled in my prior grand attempt at technology prediction, I've decided to retire my crystal ball. I can honestly say I have no idea what will be the most disruptive technology a decade from now; that is what is so exciting about the plethora of developments now. My strategy is to observe and adapt rather than predict and plan.

*• The bobsguide daily show reports from Sibos 2013 in Dubai, UAE, 16-19 September, can be seen here – **Day 1**: Technology revolution or evolution; **Day 2:** Market Infrastructure Change and Corporate Forum; **Day 3**: Compliance Forum channels frustration at regulatory overload; **Day 4**: Africa and Middle-East focus, vox pops and tech winners. The **wrap-up trends report** is available via the highlighted text. All preview material, subsequent interviews, blogs and opinions surrounding the show and other general technology trends can be seen via the **bobsguide blog section**, while the**new bobsguide bloggers (aka contributing editors)** section is **HERE**.*

Neil Ainger, bobsguide, Editor-in-Chief, on General Fintech and Industry Developments

As editor-in-chief of *bobsguide*Neil Ainger is responsible for setting the editorial strategy and writing news analysis, blogs, hosting webinars, commissioning and so forth. He has a keen interest in technology and banking, particularly in the payments, cloud, data centre, trading, infosec and mobile technology fields, having previously been the deputy editor at*Banking Technology* and editor of *FSTech*. Ainger has a BA (Hons) in English Literature from Leeds University and has been employed as a journalist since graduating in 1995. He has also worked at*gtnews* covering treasury, trade finance and so forth, and on engineering titles at Reed Elsevier, local newspapers, etc. In addition, Ainger has worked on internal publications for BT Global, PwC and Lucent Communications (in New York City), among much else.

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