

FINSERV STATE OF F **PERKS OF OPEN SOURCE** **COLLABORATION**

In this feature, we look at the rise of open source platforms in financial services, and how banks & finservs can shift their mindset to see its benefits

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PLAY: SOURCE

OPEN SOURCE

In February 2024, FinTech Magazine attended State of Open Con 24 in London, where hot on the agenda was the work financial institutions are undertaking today with open-source technology.

Historically, banks have safeguarded consumers' data as a matter of priority, spending fortunes to acquire that data in building a digital profile of a customer's financial wealth.

While this has long been the set standard of safety at financial services firms, today, the rise of open-source platforms means it doesn't have to be.

Leveraging the power of the blockchain, open-source software and technologies can be used in several ways to drive innovation, reduce costs and improve efficiency. From core banking solutions to open data – identified by McKinsey as the ability to share financial data through a digital ecosystem in a manner that requires limited effort or manipulation – open-source technologies have a significant role to play in the financial services landscape.

But while the opening up of banks and financial service providers' once-closely guarded data sets may have immediately dissuaded some banking institutions, progressive financial institutions have seen the value in leveraging open-source.

Why banks should jump at the prospect of open-source

For Lee Fulmer, the independent Chairman of the Reporting and Data Standards Transformation Board at the Bank of England, banks should

Managing Risk, Regulation and Data Governance

Report Themes Include:

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- Common Use Cases of Sustainable Compliance
- Supporting ESG with Data Compliance
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Featured Authors:



JEFF NELSON

Managing Director – Financial Crimes & Compliance Division

Precisely



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Precisely





“be thrilled at the opportunity to access a non-competitive model where they can pay fair use for data, as opposed to the high fees they currently spend acquiring data”.

He continues: “There are companies out there that are provided with data from large financial institutions, which then concatenate that data across the industry before selling it back to the same organisation they got it from.

“So, for large banks, this represents a potential loss because many of them are losing the value from their data – which can be very valuable – by someone else commercialising it and seeing no subsequent returns on it.

“That is why I believe banks should be on board with the idea of using open-source software because it completely negates any competition around data storage and distribution. If it is all in the public domain, there is no competition to be had and less money to be needlessly spent.”

Open-source software: Overcoming barriers

Indeed, even when banks and financial services providers do use open-source software, for Chris Howard, Head of the Open Source Program Office at EPAM, they do not necessarily leverage it transparently.



OPEN INVENTION NETWORK

Keith Bergelt, CEO of Open Invention Network, describes how his organisation functions

“Open Invention Network, or OIN as it’s called, is the largest patent non-aggression community in the history of tech,” says Bergelt.

“It ultimately allows for companies to feel free to adopt open source technology because close to 4,000 companies, some of the largest patent holding companies in the world, have agreed to pledge their patents in technologies that are related to the core of open source of major projects.

“The way it works is it’s free. People join, and they give as good as they get. Everybody benefits. Some people who don’t have any patents disproportionately benefit, but the companies that have the patents are reducing the risk from all their competitors and collaborators.

“We’re really creating a community. That’s what this is about. It’s creating community, a code of conduct or a set of norms around how companies engage with open source technology.”

He says: “Many traditional financial institutions are either still afraid to use open-source because they are still close-guarding their secrets, or –if they are using open-source – they are doing so in a very introverted way, consuming the technology but not contributing to the open source, blockchain-powered network.

“As such, the main topic of consideration today is collaboration, and the need to come together to build data transparently and then for the industry to standardise these practices,” Howard adds.

As not every financial institution leverages open-source software, and perhaps those that do are not open about their use of it, the first step to truly leverage the power of open-source technology is understanding the need to collaborate, with banks coming together to build data.

There are some examples already of open-source collaboration across banking organisations, but it arguably does not happen enough, and, where it does, it is the neobanks and digital players that lead the charge.

As Howard continues: “We’re on the precipice, I think, of increased collaboration in open-source, because challengers like Monzo, Starling and Revolut which are tech-focused and transparent are driving the need for change. So, for legacy banks, collaboration on open-source technologies is the first step.”

“Many of the largest banks, particularly retail banks, want to have full control of their technology”

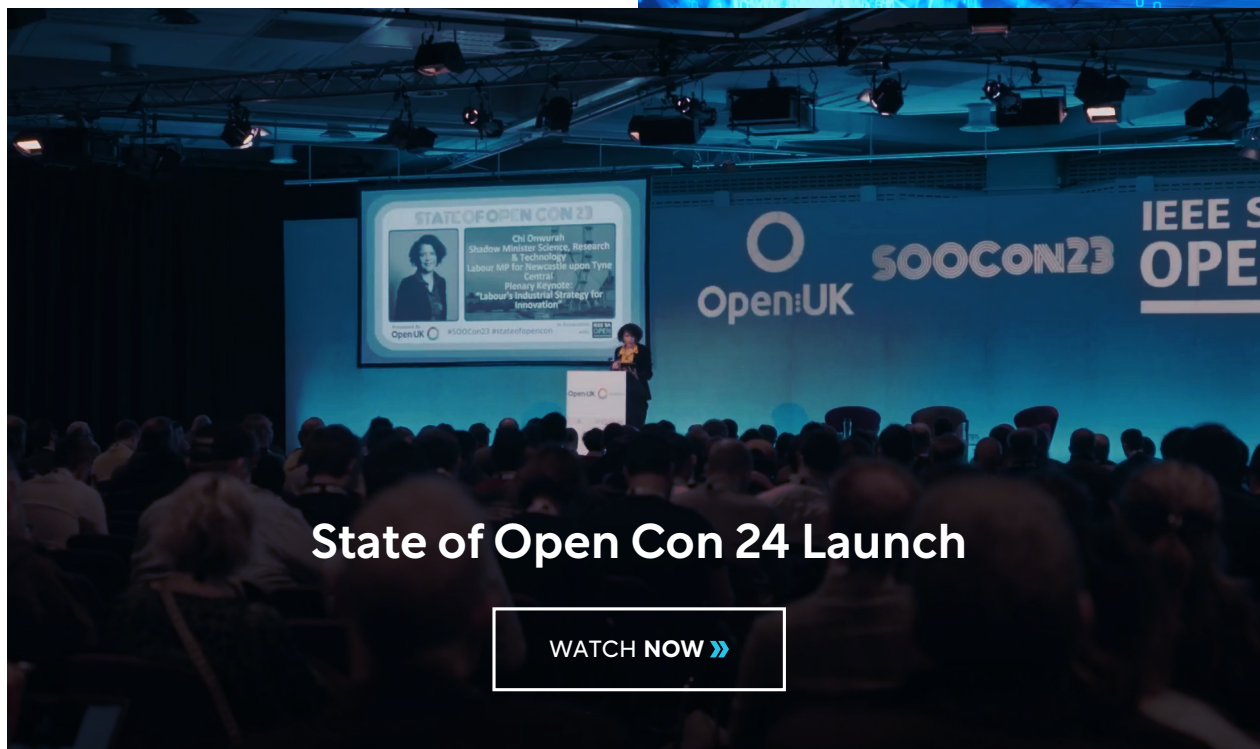
KEITH BERGELT
CEO,
OPEN INVENTION NETWORK

And, according to Ann Schlemmer, CEO at Percona, the first step for banks to start collaborating on open source is to first educate them on the value of doing so.

“The main barrier is education, particularly for those institutions that are comfortable using closed-source software. Some have a perception that open source software is not as secure, which has been proven to be false,” Schlemmer says.

“If software is out in the open, yes, hackers with bad intentions can see it, but accessing that data is harder than in the case of a closed-source platform which relies solely on the proprietor to make any fixes.

“Remember too, that if the software is open there are many white hat hackers who can see if there are any security flaws in the platform and provide fixes much more quickly.”



State of Open Con 24 Launch

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The path the open source collaboration

Our speakers agree, though, that legacy banks are – or will be in the future – starting to take steps to overcome these historic barriers to open-source adoption.

As Howard notes: “Some of the bigger financial institutions today are realising two things. The first is that if they want to retain customers and stay ahead of the curve they need to do what their digital challengers are doing.

“That means coming together to share APIs and build standard ways of working. Organisations like FINOS, for example, are getting banks that would never sit around the same table to talk about how they do their data modelling, or what their fraud detection systems look like.”

Another organisation helping bring financial institutions together to realise the power of open-source collaboration is the Open Invention Network, which tries to dispel secrecy around banking operations and foster a culture of togetherness to build something for the greater good.

Keith Bergelt, CEO of Open Invention Network, says: “We are encouraging people to recognise that where we collaborate, where we build on each other’s ideas and where the modality of open source is prevalent, is an area of freedom.”

Indeed, those who join the Open Invention Network need not have concerns about IP, as the platform provides a safe space for ideas to be shared freely.



“Some have a perception that open source software is not as secure, which of course has been proven false”

ANN SCHLEMMER
CEO,
PERCONA

For Bergelt, the rise of fintechs is pushing more legacy banks, particularly Tier 1 organisations, to develop their own technologies, or tinker with the technologies they leverage from third-party technology providers.

“Banks are used to having indemnification from the technology manufacturer, the hardware maker that’s also in charge of incorporating software,” Bergelt says.

“All of that is essentially changing today because banks are onboarding record numbers of software developers to play catch up with fintechs, which voids indemnification requirements.

“Indemnification can be voided because it no longer becomes the technology provider that brings in the



MEET THE EXPERTS

LEE FULMER



TITLE: INDEPENDENT
CHAIRMAN OF THE
REPORTING AND
DATA STANDARDS
TRANSFORMATION BOARD

COMPANY: BANK OF ENGLAND

Lee is an experienced business technologist who has been creatively disrupting the technology, media and finance industries throughout his career; always at the forefront of data and digital transformation.

CHRIS HOWARD



TITLE: HEAD OF THE OPEN
SOURCE PROGRAM
OFFICE

COMPANY: EPAM

Chris has over 15 years' experience in consulting for global organisations in devising and delivering their digital transformation programmes often working directly with CTO/CDO's at a portfolio level to shift organisational direction and achieve ambitious commercial goals.

ANN SCHLEMMER



TITLE: CEO

COMPANY: PERCONA

Ann Schlemmer is the CEO of Percona, a leader in open source database software, support, and services. She leads the company on its mission to help businesses make databases and applications run better through a unique combination of expertise and open source software.

KEITH BERGELT



TITLE: CEO

COMPANY: OPEN INVENTION
NETWORK

Open source steward with experience in organisational design and governance, strategy, business development, licensing, intellectual asset management, intellectual property finance and diplomacy.



technology and alters everything for you because software developers at banks are increasingly doing this themselves.

“Banks are, therefore, changing the dynamic between themselves and software providers by customising software which it uses – thereby becoming more like technology companies themselves in this regard and changing the relationship in terms of indemnification.

“This is why we’re seeing indemnification often not be available to protect banks from the record numbers of lawsuits we are seeing brought against

banks today by patent assertion entities that for the first time are specifically targeting open source technologies.”

In this new world where banks are increasingly looking to take control of their technology futures to better service client needs but face heightened patent litigation risk by doing so, they join the ranks of all manner of IoT, Telecommunications, Electronics, Automobile companies and, in fact, all software-intensive industries by joining together to participate in the collaborative Open Invention Network which is the world’s largest open source patent risk mitigation initiative.

“We’re on the precipice, I think, of increased collaboration in open-source”

CHRIS HOWARD
LEAD OPEN SOURCE
PROGRAMME MANAGER,
EPAM

Banks have the technologists onboard now, and collaboration across banking organisations would help support a unified culture of best practices and security features.

“Many of the largest banks, particularly retail banks, want to have full control of their technology,” Bergelt adds.

“If they need an update, they want to be able to just go and do it. They also want their own technology from a branding perspective.

“And with the advent of RISC-V, it is not so far-fetched to imagine a future in which retail banks tape out their own chips to support proprietary devices and apps and ensure customers get what they need.

“This is why leveraging open-source technology is a powerful enabler for banks to start developing their own products and services,” adds Bergelt.

Open source: The regulatory angle

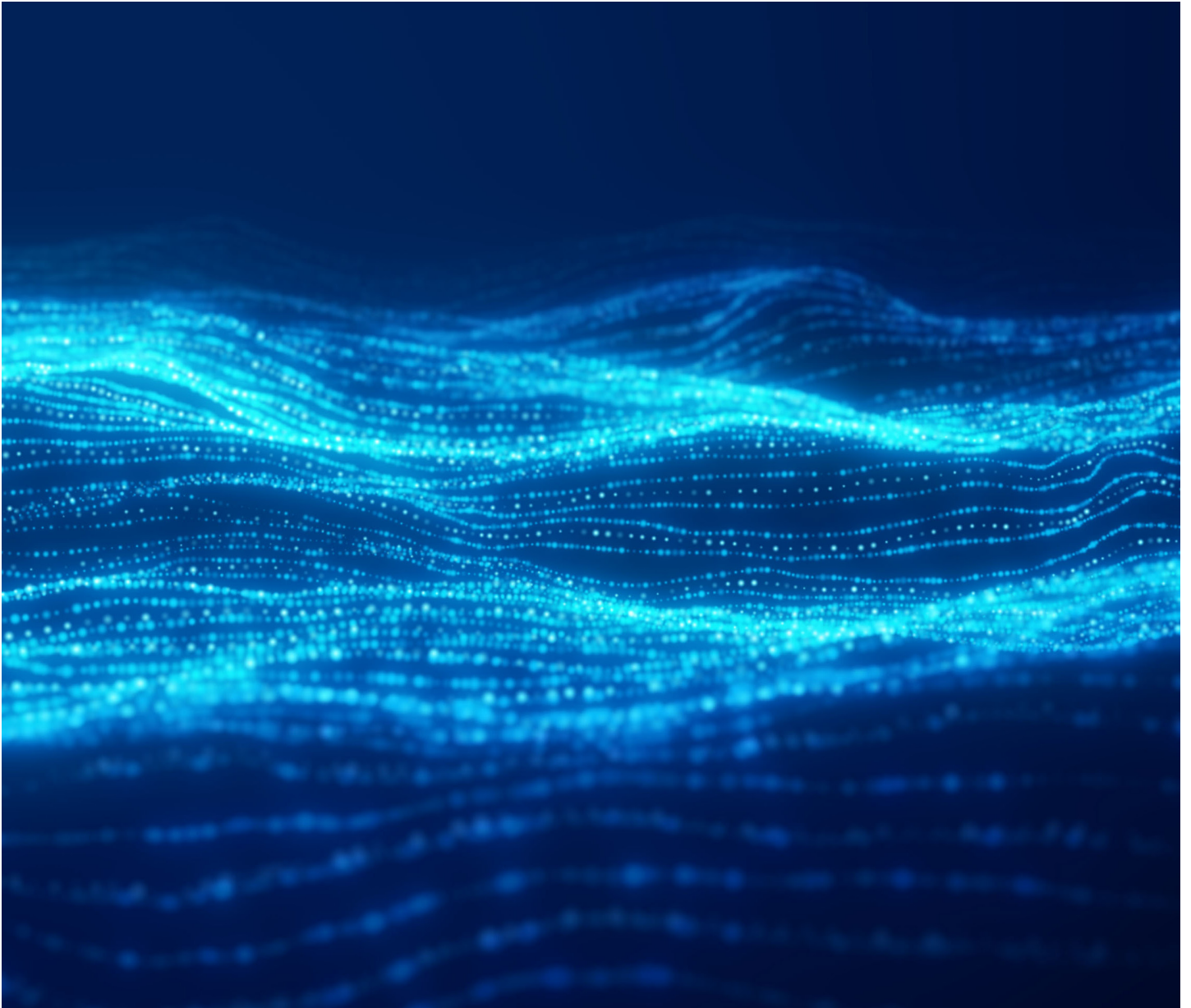
As and when open source platforms are used more frequently by banks, Fulmer



sees an opportunity for open source to be used by regulators too.

“I think, one way or another, banks will all start leveraging open-source technologies,” he says. “It lowers their costs and will enable them to commoditise some of their technology-led products and services.

“Once this becomes fully ubiquitous and normalised, it would become the view of the economy and society – which is what concerns regulators – and therefore there is scope for financial regulators to also leverage open source.”



For open source to become widely used across economies – a prerequisite for its use by regulators – Fulmer feels, somewhat ironically, that a firmer regulatory framework should be introduced to lay out the conditions of open source usage at banks and financial institutions.

“The community looking to drive the open-source agenda for financial institutions are the people we should be working with to define a regulatory framework,” Fulmer adds.

“The same way they’re trying to define a framework for AI, we should be looking to define a framework for open source.

“I think the engagement the community has with some of the regulators in the EU, the US and the UK would help in getting them all onboard with this.

“And I think that’s the thin edge of the wedge,” Fulmer concludes. “Once you get the community to agree and once you get the cohort of legislators to accept it, then I think it’s *fait accompli* for the banks.” ●