

Rise FinTech Report 2019

Q4

rise

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Hello

Welcome to the Q4 2019 edition of the Rise FinTech report, our regular take on the latest trends, topics, successes and happenings in the world of FinTech.

In previous editions, we've looked at the FinTech scene in London, Israel and New York so this time we're focusing on Asia, a region of constant innovation driven by China and India, which continue to be the largest FinTech hubs based on investment. Across the region, both consumer interest in startup technology and government support are considerable, making Asia fertile ground for disruptive innovation.

In this edition, we share some 2020 predictions and views from our Rise platform site leads as well as important developments in technology and trends that are impacting FinTech startups and the wider Asian population.

We also have an article by Abhishant Pant, founder of The FinTech Meetup, who has made an epic 25,000 km road trip to identify how advances in financial services and financial inclusion are helping address the needs of a large part of the population across Asia.

We hope you enjoy the contributions in this report.

Rise is a global network of the world's top innovators working together to create the future of financial services.

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Contents

03

Foreword:
Strength in numbers,
depth in technology

05

Editorial special:
The evolution of the
payments ecosystem:
learnings from
The Fintech Yatra

07

This quarter's spotlight:
FinTechs set for
mainstream adoption
in India

09

Asia insight:
Three prominent
FinTech nations

11

Top trends for FinTech
in Asia

12

Rise global ecosystem Q4

14

Rise global 2020 forecasts

18

Rise ecosystem insights Q4

20

Case study: Crediwatch

21

Case study: Fluid.ai

22

Join Rise

23

The Rise platform
in numbers

A broad spectrum
of technologies
across the region

Foreword: Strength in numbers, depth in technology

“We must take the blockchain as an important breakthrough for independent innovation of core technologies.” That’s how, in October 2019, China’s President Xi described what appears to be one of the first examples of a major world leader backing that technology. He further stated that blockchain technology has a wide array of applications within China, from finance and transportation to social impact. With a history of rapid and huge investment in other tech such as AI and big data (and more recently 6G mobile networks), China is sure to make successful advances this time too, just as Singapore did several years ago with Project Ubin, a collaboration across the financial services and FinTech sectors aimed at blockchain and Distributed Ledger Technology (DLT) solutions for payments and securities.

To back up President Xi’s words, the Chinese government has announced its intention of turning Hainan into the ‘blockchain province’ to develop the technology and to foster expertise in it. Furthermore, since March 2019, more than 500 blockchain projects have been registered with the authorities in China, cementing the country’s position as the world’s most prolific filer of patents.

But disruption in Asia isn’t all about blockchain in China. The region as a whole has received greater investment than any other in the world. As a result of increasing numbers of customers, its developing digital infrastructure and the number of global tech giants

there, Asia continues to innovate across a broad spectrum of technologies. In India for example, there are solutions like IndiaStack, Aadhaar and Unified Payments Interface, three initiatives that are helping to transform not just the country’s infrastructure but also the lives of the underbanked and unbanked. Read more about these projects in our Asia insight in this report.

Singapore is another powerhouse of innovation. The country is opening up its banking industry to technology companies like Razer, the leading game brand, who (through partnerships) is applying for a digital banking licence in the country. The company intends to build Razer Youth Bank targeting the under-served and digital-savvy millennial market.

These are just a small sample of the many exciting FinTech developments taking place in Asia. Given the potential and appetite for change across the region, there is no doubt there will be many opportunities for us all to play a part in the future.



Gus Macfarlane
Chief Operating Officer
Technology and
Innovation Barclays

Building a robust and evolving payments ecosystem

Editorial special: The evolution of the payments ecosystem: learnings from The Fintech Yatra

About 1 ½ years ago, I decided to map the world's FinTech startup landscape—one country at a time. Since then I have followed that map, travelling more than 25,000 km by road through India, Myanmar, Singapore, Oman, UAE and Bahrain. I have a dream to someday chart all the FinTechs between Mumbai and London by road.

I'll share some of my observations so far on this journey, specifically focusing on one area of great interest to me, the benefits to society of a robust and evolving payments ecosystem in those countries.

- **The underground or black economy:** Various estimates suggest that the underground economy accounts for 25-75% of GDP. This represents an enormous loss in tax revenue. Even if a quarter of the tax were collected, the impact on infrastructure, healthcare and social wellbeing could be enormous.
- **The cost of cash:** Operational costs to the economy of managing billions of currency notes and coins, along with counterfeit money, are large. The lost productivity costs of cash lying around in wallets, cupboards and under mattresses are even bigger. Lack of secure storage places a disproportionate burden on the poor. The benefit of having a reliable, digitised payments ecosystem would bring substantial cost efficiencies and reduce this burden.
- **Inefficient government programmes:** Billions are lost in leakage from government subsidies and welfare schemes that provide fertiliser, food and fuel to deprived members of society. Just think of the savings

and societal benefits if all of these payments were made directly into verified bank accounts.

What have I learned from these observations and the experiences I've picked up along my trip? First, it's important to recognise that there's a long way to go. Considering the friction that exists even in affluent and evolved markets like Singapore, developing a robust payments ecosystem will take time, especially in rural areas.

A good start is to create segmented payment solutions like those specifically for transit systems, small businesses, peer-to-peer scenarios and then over time connect these solutions to a unified ecosystem.

Regular and faster settlement is also key. Given that new solutions will compete with cash, they'll need to provide immediate, full and final settlement. Anything less effective simply won't succeed.

Finally, be aware that change will spread from the cities. Solutions will emerge and gain critical mass most effectively from those connected hubs. Building a payments ecosystem in big, metropolitan areas will be easier and a good way to test, learn and iterate. Follow my journey at thefintechmeetup.com



Abhishant Pant
Founder
The FinTech Meetup

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60% of India's retail transactions expected to be digital in five years

This quarter's spotlight: FinTechs set for mainstream adoption in India

The Government of India's vision of a Digital India is paving the way for rapid digital banking and FinTech adoption. India, along with China, has the highest adoption rate (87%)¹ of FinTechs among consumers. Two key enablers of this FinTech wave are digital infrastructure and financial inclusion.

IndiaStack, a set of open APIs that helps governments, businesses, startups and developers solve some of India's most intractable problems, has proved to be a revolutionary tool in the country's efforts to transform its digital infrastructure. It's helping drive India towards a presence-less, paperless and cashless service delivery. Key components of the new digital infrastructure are Aadhaar and Unified Payments Interface (UPI). Aadhaar is a verifiable 12-digit identification number issued by the Government of India to residents free of charge. So far, it's already provided unique identification numbers to 1.1 billion people. Unified Payments Interface (UPI) is an advanced public payments system that's already facilitated 2.7 billion phone-based bank transfers without the need for account details. Regulators have played a key role by launching sandboxes so FinTechs can connect with banking tech and regulatory environments. Using IndiaStack APIs as the foundation, Open Banking has started to take off as consumers seek the dual benefits of trust from banks and cutting edge user experiences.

Thanks to government measures and the efforts of private players, India is a massive, connected consumer market. Over half of the population now has access to mobile phones and the internet, and data costs have declined by almost 95% compared to 2013. Through the government's mass financial-inclusion programme, Jan-Dhan Yojana, 80% of Indians now have access to a bank account, compared to just 53 percent a few years ago. Price comparison sites, such as BankBazaar and Paisabazaar, are also growing in popularity and provide access to a range of products from banks and other financial service providers.

Payments startups have dominated the FinTech scene here. Almost 60% of India's retail transactions (by value) is expected to be digital by 2025. And, with a funding gap of \$300 billion in consumer credit and \$200 billion in SME financing, lending startups are beginning to gain as much prominence as their payments counterparts. Of all startups, those that specialise in two areas have attracted most funding in Q3 2019: leveraging digital lending platforms and using innovative alternative credit models for financial institutions and Non-Banking Financial Companies (NBFCs).



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The rise of the super app, an Asian phenomenon



Asia insight: Three prominent FinTech nations

Governments and businesses across Asia are investing in FinTechs – both to promote financial inclusion and commercial gain. The leading nations in this space are China, India and Singapore. According to the latest rankings², 34 companies from Asia figure in the top 100 global FinTech innovators. Government and regulatory support is a clear driver of this success. For example, the Monetary Authority of Singapore has committed \$168 million over the next five years to grow the ecosystem in Singapore. Another key driver is consumer demand – according to the latest EY FinTech Adoption study, “in just two years, consumer usage rates of FinTech-powered services have doubled, and in some cases tripled, across key Asia-Pacific markets.”

In India, payments startups are front-runners in the industry as they address the difficulty that the underbanked and unbanked have in making payments. This is a definite trend we’re seeing in Rise Mumbai (see p17). In recent years, this trend has been supplemented by many lending and wealth startups.

Uniquely in Asia, we see an expansion in ‘super apps’. A super app is like a Swiss Army knife, a one-stop-shop app that offers multiple services in a single application. An example is Grab Financial, which is seeking to be the everyday app for consumers in Southeast Asia. Grab offers payments, lending and insurance around its core ride-hailing business.

Neobanks are also emerging across Asia. Many markets have issued virtual banking licenses to young startups. Razorpay in India, for example, offers convenient access to financial services for millions of SMEs who typically do not meet the lending criteria of traditional banks. Recently, Razorpay launched a corporate credit card to small businesses, leveraging non-traditional methods of assessing clients’ eligibility and creditworthiness.

Non-Asian companies are also an important part of local FinTech ecosystems. They target Asia for its large customer bases, advanced digital infrastructure and consumers who are responsive to new technologies. These global players regularly cooperate with local partners to access the market. The UK is among the largest exporter of financial services, FinTech companies and talent to Asia, particularly India.



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The convergence of three technologies - IoT, DLT and AI

Top trends for FinTech in Asia

Innovative technology, competitive banking incumbents, government initiatives and regulatory leadership are all creating an appetite for FinTech in Asia. Let's take a look at some of the emerging trends in the region.

Sustainability and green finance – FinTech for good

Increasingly, banks in Asia are leveraging the talent and power of the financial system, and recent advances in technology, to create a more inclusive and empowered society. The financial sector is increasingly expected to take an active role in helping tackle climate change and encourage global collaboration in this area.

Government support for digital currency

The Chinese Government has announced its ambition to be the first country to launch a digitised domestic currency, also known as a Central Bank Digital Currency (CBDC). Unfortunately for China, the central bank of Cambodia appears to have already taken this crown with the launch of its Bakong project³ which aims to eliminate transfer fees and create a real-time payments infrastructure.

A trustless digital world, where DLT is the future

CEOs of leading international and local Asian banks recently shared a panel at the 2019 FinTech and SWITCH Innovation Festival. One discussion point was their shared desire to create a 'trustless' and frictionless financial system using Distributed Ledger Technology (DLT). This

echoes the comments from Sopendu Mohanty, Chief FinTech Officer at the Monetary Authority of Singapore, that Distributed Ledger Technology (DLT) and blockchain are core to Singapore's FinTech ecosystem.

New standards required to drive growth

There are growing calls for international standards to help innovation scale. Shared standards will facilitate the cooperation required to realise the benefits of emerging technology, especially Smart Contracts. Standards will also address the problems of monopoly, centralised misuse and single points of failure in existing systems, and unlock new business models in FinTech and LegalTech ecosystems.

Blockchain, IoT and AI are converging

A growing theme in Asia is the convergence of three technologies – the Internet of Things (IoT), DLT and Artificial Intelligence (AI). If consensus can form and get industry investment, these technologies could become synergistic, with a blockchain acting as a distributed, decentralised and immutable ledger used to store encrypted data gathered from IoT sensors, and AI acting as the 'brain' that analyses and makes decisions on the data.



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Rise global ecosystem Q4



This infographic shows companies resident at our Rise sites. The information is accurate at the time of publication.

Rise global 2020 forecasts

With a new decade ahead of us, we couldn't be more excited and proud to use our Rise ecosystem to bring together the key players in FinTech from around the world. 2020 is a big birthday for Rise as we officially turn five, marking a key milestone on our journey. This year, we're not only focusing on our physical locations, we're also expanding our digital connectivity. As the global lead for the Rise platform, I'm proud to have been part of the Rise journey for half of the last decade, to have set Rise up for success and, looking forward, to help shape the next 10 years of innovation in financial services.

Keeping an eye on trends in FinTech is at the core of what we do. With the help of our Rise members, ecosystem partners and thought leaders we bring insight to our network through initiatives like our Rise Presents events, the Rise FinTech Podcast and the very report you're reading now.

2020 brings new opportunities, new investments and, of course, new transformative technologies. In this section, our local site leads provide their thoughts on those things – the most pertinent FinTech trends to watch out for in their parts of the world.

Before I hand over to London, New York and Mumbai, let me share the outlook from Rise Tel Aviv.

The year is starting strongly at that site, Israel's #HomeofFinTech, with

our support for Tel Aviv FinTech Week at the beginning of February. Israel is renowned as the 'startup nation' and the country's expertise will continue to be dominated by deep technology solutions that startups offer to the rest of the world. In 2019, we saw these solutions being applied in the areas of payments, credit, lending and insurance. We anticipate these areas will continue to grow in 2020. There's also no doubt we'll also see more advances in cybersecurity, an area of excellence for the Israeli FinTech scene that proved its robustness in 2019 with impressive funding of ca. \$1.9 billion across 78 deals, almost double that in previous years. In part, this will be due to the successes of innovative companies like Armis, Twistlock, Puresec and Demisto, all of which were acquired in 2019 for significant sums by big tech players. We anticipate more deals like this in Israel this year.

And what of our other global locations? It's over to the platform managers from each Rise site, who take a look at what 2020 holds for their regions.



Magdalena Krön
Rise Global FinTech
Platform Director

2020 forecast: Rise London

2020 will be all about data, data, data. Last year saw the UK's banking system deliver PSD2. It's fair to say that UK banks are just beginning to produce game-changing APIs that appeal to FinTechs. This year, we anticipate continued drive in that direction. We predict the banks will take further steps and continue to respond to Open Banking by delivering richer services to customers of all demographics. Collaboration with FinTechs will be key, and that's sure to ramp up over the next 12 months. So much so, that we think partnerships, mergers and acquisitions will be the top headlines for 2020.

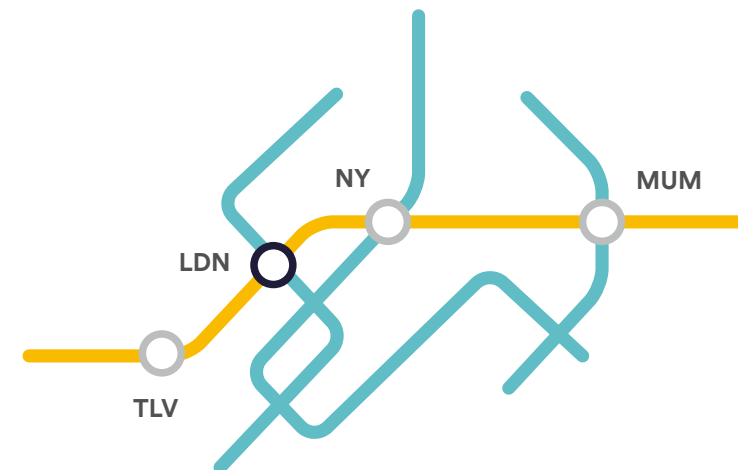
We're also extremely excited about UK FinTech Week, 20th - 24th April.

This year, Rise will be running a pop-up space at the initiative's Global Summit and hosting fringe events at our home in Shoreditch. UK FinTech Week brings together the best minds in the business to identify and discuss the latest hot topics and disruptive change. There will be ample opportunities for Rise and our members to connect with each other, thought leaders in the industry, and the wider FinTech ecosystem.



Clare Whitehead
Rise London

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2020 forecast: Rise New York

Mergers and acquisitions in the US market will be a big trend in 2020, with top FinTechs angling to be acquired and top financial services companies fighting over the best ones. In this regard, Visa's recent acquisition of Plaid for \$5.3 billion is just the beginning. Expect some other big payouts this year.

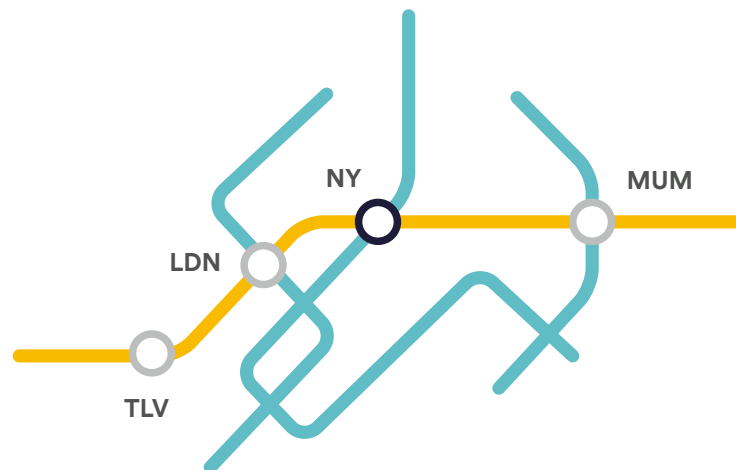
At Rise New York, we are excited about New York FinTech Week, 30th March – 3rd April, that will see discussions and events take place covering the latest technology, companies and trends.

This year will also see us continue to facilitate and build out the FinTech ecosystem at our central, flagship hub in the Flatiron District of the city. We're

passionate about helping cutting-edge startups and scaleups connect, create and scale their businesses here, and we continue to host some amazing companies as well as a series of events and programmes to support the community, foster talent and see the very best in technology take shape.



Ilana Fass
Rise New York



2020 forecast: Rise Mumbai

In 2020, I anticipate several local and global FinTechs will continue to target the large Indian consumer market with innovative financial products. The uptake of FinTech solutions for payments and lending is especially promising.

In addition, with the Government's financial inclusion and financial literacy initiatives playing out, several innovative and affordable micro-offerings are evolving to cater to the unbanked and underbanked segment.

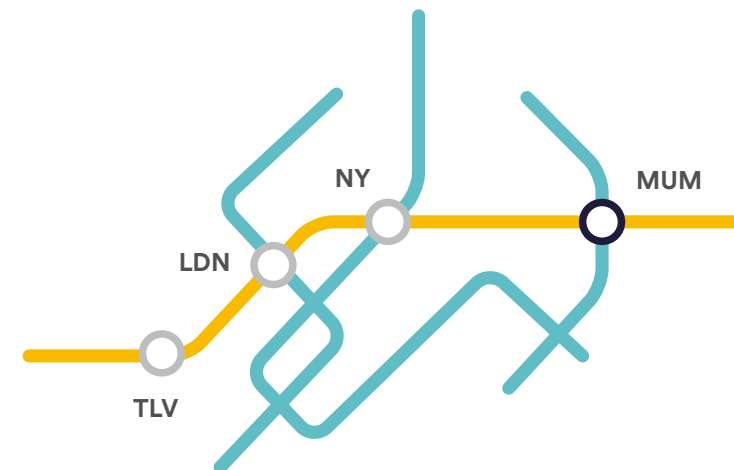
Rise Mumbai has a current focus on data analytics and reporting, cognitive automation and AI-enhanced solutions like facial recognition and digital Know Your Customer (KYC). Several Barclays clients in India have shown a keen interest in partnering with Rise Mumbai startups to improve their alternative lending capabilities.

I'm really excited that Rise Mumbai is the leading FinTech hub in India and is deeply integrated with the Indian FinTech landscape. This close relationship will continue in 2020. As examples, our recent memorandum of understanding with the Indian Chamber of Commerce promotes startups across India, and we're working with the local startup ecosystem and Barclays colleagues to create compelling innovations and investment opportunities for clients.



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Rise ecosystem insights Q4

London

- \$569m in VC investments
- 51 VC deals
- Top VC deals:
 - Zopa – \$181m
 - Rapyd – \$100m
 - Tide – \$55m
- 7,800+ Rise visitors
- 82 Rise events

Tel Aviv

- \$118m in VC investments
- 3 VC deals
- Top VC deals:
 - Jasper/CreditStacks* – \$110m
 - Otoma – \$8m
 - Magic Square – undisclosed
- 1,800+ Rise visitors
- 24 Rise events

New York

- \$327m in VC investments
- 41 VC deals
- Top VC deals:
 - Octane Lending – \$47m
 - Digital Asset – \$35m
 - Bison Trails – \$26m
- 3,800+ Rise visitors
- 58 Rise events

Mumbai

- \$70m in VC investments
- 4 VC deals
- Top VC deals:
 - Acko General Insurance – \$36m
 - Amica Financial Technologies – \$24m
- 2,800+ Rise visitors
- 59 Rise events

Rise New York re-opened in October 2019. Some data may be affected as a result. VC investment statistics are for the fourth quarter of 2019, provided by Innovate Finance and are not limited to Rise ecosystem companies.

* CreditStacks renamed Jasper

Case study: Credivatch



The proposition

A software and data-as-a-service platform that provides an automated, intelligent and curated data marketplace (using consent-based blockchain architecture) to aid faster and accurate credit decision-making at scale. The company's platform uses proprietary credit and other risk assessment models to provide actionable intelligence for dynamic credit management.

Key features

- Derives insights from distributed and unstructured data sources, using proven computational techniques like Machine Learning, Natural Language Processing and visualisation to help businesses make fast and smart decisions
- Automates loan portfolio monitoring with a predictive engine and alerts
- Combines public data with consent data to create a 360 degree picture

Value

- Reduction in the overall lead time for the Know Your Customer (KYC) process
- Smoother KYC process as only relevant inputs are required from the customer
- Improved customer experience with reduced onboarding time and minimal documentation requested by the bank
- Real-time monitoring predicts delinquency with a lead time of a year
- Frees up resource time for front office staff enabling them to focus on their core work

The Barclays partnership

Credivatch completed a proof-of-concept (PoC) as part of the Barclays Accelerator programme and created a customised KYC offering for the Barclays Corporate Banking business.

After a six month pilot engagement and additional customisations, Credivatch has been onboarded as a vendor by Barclays.

credivatch.com

Case study: Fluid.ai



The proposition

Fluid.AI is an artificial intelligence (AI) platform that uses machine learning to drive decision-making for a variety of business operations. The AI is plug-and-play so there's no installation overhead, and is connected to hundreds of data sources to maximise intelligent decision-making.

Fluid.AI also uses AI to create sophisticated virtual customer assistance for firms with a physical presence. Motion-sensitive cameras mounted in a kiosk detect customer reactions, facial expressions and gestures to apply for a loan, assess credit card options or get the latest rates.

Key features

- Genetically evolving predictions that continuously learn from previous decisions and become smarter with time
- Speaks to customers and puts them in a digital environment where they can explore using gestures and voice
- Automatically recognises customers using advanced facial recognition
- The entire customer experience works seamlessly on mobiles

Value

- Resourcing is based on call volumes, allowing optimal employee allocation across departments
- Reduction in hiring costs
- Quicker resolution of queries
- Drives sales and marketing initiatives – explore products interactively, and sign up for a bank account or credit card in minutes

The Barclays partnership

The Barclaycard Technology team in India is working with Fluid.AI to develop a solution that provides intelligent predictions on demographic, transactional and campaign-specific response data for cross- and up-selling to cards and loans customers.

fluid.ai

Join Rise

The mindset of a startup, the expertise of a bank

Why join?

At the [#HomeofFinTech](#), conditions for innovation and growth in financial services are unmatched.

We have helped over 175 FinTech companies globally who call Rise home, raise capital and navigate the hurdles of financial regulation and compliance to build the future of financial services. Together.

[rise.barclays](#)

What you get:



Unique FinTech workspace



Global like-minded community



Access to investors



Help from advisors and mentors



Barclays industry expertise and support



Global industry events

The Rise platform in numbers

1,000+
Individual Rise members

175+
Rise FinTech resident companies

80,000+
Yearly visitors (2019)

35,000+
Social media followers

rise

Created by



About Rise, created by Barclays

Rise, created by Barclays, is a global community of the world's top innovators working together to create the future of financial services. With a diverse network of FinTech talent, one of the world's leading accelerator programmes and workspaces based in the main FinTech hubs of the world, Rise is an exclusive place for FinTech companies to connect, create and scale together with Barclays.

To join our community, or keep in touch with the latest Rise news, visit or follow us on:

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