

### Banking and Capital Markets bi-weekly news round-up

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# Welcome to the DXC-curated news round-up.

A collection of technology-related articles for banking and capital markets (BCM). DXC Technology (NYSE: DXC) helps global companies run their mission-critical systems and operations while modernizing IT, optimizing data architectures, and ensuring security and scalability across public, private and hybrid clouds.

With this news round-up, published every 2 weeks, we highlight innovative and emerging news, regulation and research, as well as including DXC thought-leadership that explores new ideas, technologies and best practices.

To thrive in the complex and competitive financial market, banking and capital markets firms need products and services that work for twenty-first century customers and meet regulatory obligations. Modernise your IT and transform your business with <a href="https://doi.org/10.25/2016/bit/20

Should you have any comments or suggestions, please feel free to contact me. Happy reading.



### **Jean-Paul Simoes**

Director of Banking and Capital Markets (BCM) Compliance, DXC Technology

jean-paul.simoes@dxc.com



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#### **Artificial Intelligence (AI)**

### The AI Boom Could Use a Shocking Amount of Electricity

Note: Accessing the full article may require a subscription.

**Scientific American**: Every online interaction relies on a scaffolding of information stored in remote servers—and those machines, stacked together in data centers worldwide, require a lot of energy. Around the globe, data centers currently account for about 1 to 1.5 percent of global electricity use, according to the International Energy Agency. And the world's still-exploding boom in artificial intelligence could drive that number up a lot—and fast.

Researchers have been raising general alarms about Al's hefty energy requirements over the past few months. But a peer-reviewed analysis published [recently] in Joule is one of the first to quantify the demand that is quickly materializing. A continuation of the current trends in Al capacity and adoption are set to lead to NVIDIA shipping 1.5 million Al server units per year by 2027. These 1.5 million servers, running at full capacity, would consume at least 85.4 terawatt-hours of electricity annually—more than what many small countries use in a year, according to the new assessment.

### **We Don't Actually Know If AI Is Taking Over Everything**

Note: Accessing the full article may require a guest account or subscription.

**The Atlantic:** Since the release of ChatGPT last year, I've heard some version of the same thing over and over again: What is going on? The rush of chatbots and endless "Al-powered" apps has made starkly clear that this technology is poised to upend everything—or, at least, something. Yet even the Al experts are struggling with a dizzying feeling that for all the talk of its transformative potential, so much about this technology is veiled in secrecy.

It isn't just a feeling. More and more of this technology, once developed through open research, has become almost completely hidden within corporations that are opaque about what their Al models are capable of and how they are made. Transparency isn't legally required, and the secrecy is causing problems: Earlier this year, The Atlantic revealed that Meta and others had used nearly 200,000 books to train their Al models without the compensation or consent of the authors.

Now we have a way to measure just how bad Al's secrecy problem actually is. Yesterday, Stanford University's Center for Research on Foundation Models launched a new index that tracks the transparency of 10 major Al companies, including OpenAl, Google, and Anthropic.



### Al's "incremental" impact on banks no BOOM is coming!

Note: Accessing the full report and/or report may require a subscription.

**Cashless:** S&P is an AI hype-buster claiming AI's impact on banks will be "incremental" in the next 5 years! S&P Global Ratings writes one of the best retorts against AI hype I've seen. While <u>S&P agrees that AI is a "game changer,"</u> it sees only incremental gains in the near term for banks, no boom!

TAKEAWAYS: (read pages 6-7, 12-14 [in S&P Global Ratings report])

- "It remains to be seen to what extent banks that successfully deploy Al strategies materially outperform those that are Al laggards."
- "It remains to be seen at what speed and to what extent, it makes business sense for banks to invest in transformational AI strategies."
- Notable changes due to the application of generative AI in banking are unlikely to be immediate."
- "The bulk of banks' near-term use cases will likely focus on offering incremental innovation (i.e., small efficiency gains and other improvements across business units)."
- "A 10% reduction in bank staff costs would, on average, improve return-onequity by about 100 bps and cost-to-income ratios by about 3% points."
- The [above] potential gains would have to be balanced against the investment in tech that they require, and against the opportunities for banks to reduce employee numbers.

### Minds of machines: The great AI consciousness conundrum

Note: Accessing the full article may require a subscription.

MIT Technology Review: David Chalmers was not expecting the invitation he received in September of last year. As a leading authority on consciousness, Chalmers regularly circles the world delivering talks at universities and academic meetings to rapt audiences of philosophers—the sort of people who might spend hours debating whether the world outside their own heads is real and then go blithely about the rest of their day. This latest request, though, came from a surprising source: the organizers of the Conference on Neural Information Processing Systems (NeurIPS), a yearly gathering of the brightest minds in artificial intelligence.

Less than six months before the conference, an engineer named Blake Lemoine, then at Google, had gone public with his contention that LaMDA, one of the company's Al systems, had achieved consciousness. Lemoine's claims were quickly dismissed in the press, and he was summarily fired, but the genie would not return to the bottle quite so easily—especially after the release of ChatGPT in November 2022. Suddenly it was possible for anyone to carry on a sophisticated conversation with a polite, creative artificial agent.



#### **Bank Sector**

#### **Systemic Risk Survey Results - 2023 H2**

**Bank of England:** The Systemic Risk Survey contributes to [protecting and enhancing the UK financial system's stability] by quantifying and tracking, on a biannual basis, market participants' views of risks to, and their confidence in, the stability of the UK financial system.

#### Key results from 2023 H2 survey:

- Survey respondents remain confident in the stability of the UK financial system and reported a similar level of confidence to 2023 H1.
- The perceived probability of a high-impact event affecting the UK financial system in both the short term and medium term is lower than judged in the previous survey.
- Cyber-attack and geopolitical risks remain the most frequently cited risks among participants. The number of participants citing risks associated with a UK economic downturn has continued to increase sharply.
- The number of survey respondents citing inflation risk has slightly increased after having decreased in the previous survey.
- The risk of cyber-attack, geopolitical risk and inflation risk are still considered the most challenging for firms to manage by a significant margin.
- A number of respondents flagged artificial intelligence as posing new risks to financial stability.

#### **DXC's perspective**

The CFPB's proposed new rules for data-sharing will formalise the 'rules of the game' among banks, fintech and customers. The aim is to place the customer very firmly in control of who gets access to their data. The requirement for banks to make product terms and pricing available opens the door to easier product comparison and account switching. All the same, the proposals are not nearly as prescriptive as the EU's PSD2/3 or the UK's Open Banking. But that makes sense, given the United States' less interventionist approach to government.

David Rimmer Industry Advisor, BCM DXC Technology

### How data sharing could change under CFPB's proposed new rules

Note: Accessing the full article may require a subscription or small payment.

**American Banker:** U.S. banks have shared their customers' account data with fintechs, an activity some call "open banking," for more than a decade. But they haven't always done it knowingly or willingly, and it's been a source of tension among banks, data aggregators and fintechs. Could the data-sharing rules the Consumer Financial Protection Bureau proposed last week make a difference?

The CFPB's proposed data-sharing rules under Section 1033 of the Consumer Financial Protection Act of 2010 say banks must share transaction data for deposit and card accounts with fintechs at customers' request, including transaction amount, date, payment type, pending or authorized status, payee or merchant name, rewards credits, fees or finance charges and account balance. Banks would have to provide at least 24 months of historical transaction data and information about upcoming payments. They also would have to provide interfaces developers can use to create pipelines that receive this data.

The proposal would limit the data that data aggregators like Plaid, Envestnet Yodlee, Finicity and MX gather and retain to only what's reasonably necessary to provide the consumer's requested product or service.



#### **BigTech**

### <u>Australia moves to give RBA oversight of Apple Pay</u>

**Finextra:** Australia's government has set out plans to regulate digital wallet providers such as Apple and Google in the same way as other payment services.

With the use of mobile wallets soaring, the government has moved to amend the Payment Systems (Regulation) Act 1998 to update the definition of 'payment' and 'payments systems' to capture new methods. This will ensure that the Reserve Bank of Australia can regulate these providers and also introduce a Ministerial designation power that would allow particular services or platforms that "present risks of national significance" to be subject to additional oversight by regulators.

Treasurer Jim Chalmers says: "We want to make sure the shift to digital payments occurs in a way that promotes greater competition, innovation and productivity across our entire economy."

The draft legislation is now open to public consultation and is expected to be introduced to parliament later in the year. It is part of Australia's strategic payments plan that will also see the phasing out of cheques by the end of the decade, a full transition to the New Payment Platform, work to maintain access to cash, and exploratory work on a possible CBDC.

#### **Big techs in finance**

**Cashless:** Big Tech swings a double-edged sword in finance, one side helping and the other harming society. Read how [in the BIS Working Paper – <u>Big techs in finance</u>]!

The BIS paper focuses on the rise of big techs in finance and its implications and sees both risk and rewards with their incredible rise. Do the rewards outweigh the risks? Yes!

TAKEAWAYS: Risk **X** and reward **✓**!

- Big techs generate a large stock of user data due to their business models, which may harm data privacy even though it allows them to offer a range of financial services.
- ★ They can dominate markets: big tech credit growth in China outpaced traditional bank credit, with an average annual growth rate of 37% (2020-21), compared to banks at 13%!
- Despite big tech dominance in China they haven't caused destabilizing financial stress to banks. Your bank's cries of imminent death at the hands of big tech are bunk!
- Big techs' networks, access to non-traditional data, and use of machine learning can enhance financial inclusion, especially among the unbanked!
- Big techs' provision of financial services can lead to regulatory challenges like market dominance, price discrimination, algorithmic discrimination, and threats to user privacy.



#### Cloud

### Banks benefit from managed multi-cloud services and platforms

**DXC Technology:** Many financial services companies have had to digitize activities faster than they had planned. During the pandemic, for example, these businesses had to have a way to continue providing seamless online services when physical engagement with customers became restricted. This and other factors have increased the use of scalable cloud services.

At the same time, many organizations' cloud strategies have changed from a purely cloud first approach to one that considers appropriate platform and time for the workload transition. Being able to select a service unique to a particular cloud service provider enables a competitive advantage — the business gains immediate access to toolkits to help drive digital business transformation. While the march to cloud has accelerated, organizations remain under pressure to ensure that true business value is the driver.

New technology, such as generative artificial intelligence (GenAl), is spurring an era of transformational innovation in the BCM industry as companies seek to improve decision-making, optimize operations, accelerate the provision of new services and enhance customer experiences.

#### **Consumer Credit**

#### <u>CFPB Report Finds Credit Card Companies</u> <u>Charged Consumers Record-High \$130 Billion</u> in Interest and Fees in 2022

Consumer Financial Protection Bureau: The CFPB [on Oct. 25th] released its biennial report to Congress on the consumer credit card market. The report found that in 2022 credit card companies charged consumers more than \$105 billion in interest and more than \$25 billion in fees. Total outstanding credit card debt eclipsed \$1 trillion for the first time since the CFPB began collecting this data. The report highlights areas of concern, including more consumers carrying balances month to month, with many falling deeper into debt over time, while credit card company profits remained significantly above prepandemic levels.

"Last year, Americans paid \$130 billion in interest and fees on their credit cards," said CFPB Director Rohit Chopra. "With credit card debt crossing the trillion-dollar mark, we will be working to prevent bait-and-switch tactics when it comes to rewards and to increase refinancing activity so consumers can get lower rates."

Under the Credit Card Accountability Responsibility and Disclosure Act (CARD Act), the CFPB regularly reviews developments in the credit card market. Today's report, the CFPB's sixth, identified several recent trends in consumer credit card activity.



#### **Cybersecurity**

#### **Ransomware Self-Assessment Tool**

**Conference of State Bank Supervisors (CSBS):** The Bankers Electronic Crimes Taskforce, state bank regulators and the United States Secret Service collaborated to develop <u>this tool</u> to help financial institutions periodically assess their efforts to mitigate risks associated with ransomware and identify gaps for increasing security.

This document provides executive management and the board of directors with an overview of the institution's preparedness towards identifying, protecting, detecting, responding, and recovering from a ransomware attack. It may also assist other third parties (such as auditors, security consultants and regulators) that might review your institution's security practices.

Ransomware is a type of malicious software (malware) that encrypts data on a computer, making it difficult or impossible to recover. Attackers usually offer to provide a decryption key after a ransom is paid; however, these keys may not work (if they are provided at all), which could make the financial institution's critical records unavailable. In addition, attackers may utilize extortion tactics to threaten the institution with public disclosure of exfiltrated customer or company information if the ransom is not paid.

#### **DXC's perspective**

In today's world, where technology is everywhere and threat actors are increasingly intelligent and well organized, the basics of the five key principles first launched by <u>NIST</u> in 2014 are still relevant, nearly 10 years later: identify, protect, detect, respond and recover. Whilst this does not prevent a cyber incident, it does increase your speed to recovery. And as the article highlights, in a doomsday scenario the ability to recover could literally save the world trillions!

John Mundell Sales Lead, Europe - Security DXC Technology

#### <u>Lloyd's of London finds hypothetical</u> <u>cyberattack could cost world economy \$3.5</u> trillion

**The Record:** Insurance giant Lloyd's of London has warned that the global economy could lose \$3.5 trillion as a result of a major cyberattack targeting payment systems.

The hypothetical scenario — modeled by the insurance marketplace alongside the Cambridge Centre for Risk Studies — is not considered likely. The researchers suggested it had roughly a 3.3% chance of happening, which it extended to a 1-in-30-year probability.

The British government has also previously conducted research into the likelihood of a cyberattack on the financial system and found a catastrophic incident unlikely. In its National Risk Register, the worst-case scenario of an attack on financial market infrastructure was modeled as an attack against a single network and was only considered to have a "remote chance" of occurring within a limited forecast period.

In the government's scenario, the attack would have a significant impact on the financial system, including on the processing of financial transactions, potentially causing people to lose confidence in both the availability and integrity of financial data and the financial system as a whole.



#### **DXC's perspective**

This is a future challenge of gigantic proportions. It underlines the need for a layer cake of security and continual investment, as new security challenges and threats are forever on the increase. Standing still is never an option. Applying some thought to the challenge of encrypted data being cracked by a quantum computer (do not confuse quantum with today's super computers): Preventing the encrypted data from being accessed would play a massive preventative part. Today's modern controls which help achieve such prevention are commonly termed 'zero trust'. When implemented correctly, as DXC does for our customers, these controls ensure authentication at many layers — identity, device, network, application and ultimately, the data itself.

Andrew Shephard
Security Specialist, BCM & Insurance,
UKI
DXC Technology

#### **DXC's perspective**

Consumers and businesses around the world are demanding faster and cheaper ways to pay, driving many central banks and governments to implement instant payment strategies. These include creating new payments infrastructure to facilitate real-time payment flows. Interestingly, based on the <a href="Prime-Time">Prime-Time</a> for Real Time 2023 payment report, more mature markets are slower to adopt these capabilities compared with smaller European and Asian countries. Substantial growth of instant payments is anticipated. By 2027, real-time payments are expected to account for 27.8% of all electronic payments globally, up from 18% in 2022.

Paul Sweetingham Global Banking Offering & Solutioning Leader DXC Technology

## DXC Technology Banking and Capital Markets bi-weekly news round-up

### The Race to Save Our Secrets From the Computers of the Future

**The New York Times:** They call it Q-Day: the day when a quantum computer, one more powerful than any yet built, could shatter the world of privacy and security as we know it.

It would happen through a bravura act of mathematics: the separation of some very large numbers, hundreds of digits long, into their prime factors.

That might sound like a meaningless division problem, but it would fundamentally undermine the encryption protocols that governments and corporations have relied on for decades. Sensitive information such as military intelligence, weapons designs, industry secrets and banking information is often transmitted or stored under digital locks that the act of factoring large numbers could crack open.

Among the various threats to America's national security, the unraveling of encryption is rarely discussed in the same terms as nuclear proliferation, the global climate crisis or artificial general intelligence. But for many of those working on the problem behind the scenes, the danger is existential.

"This is potentially a completely different kind of problem than one we've ever faced," said Glenn S. Gerstell, a former general counsel of the National Security Agency and one of the authors of an expert consensus report on cryptology. "It may be that there's only a 1 percent chance of that happening, but a 1 percent chance of something catastrophic is something you need to worry about."

#### **Payments**

### For broader adoption of FedNow, experts say it's all about use cases

Note: Accessing the full article may require a subscription.

**American Banker**: The Federal Reserve's instant payments network has been live for three months, but the system is still waiting on banks — and their customers — to get with the program.

FedNow has attracted dozens of banks and credit unions interested in supercharging their intake of funds. But getting more to connect and transmit through the system will rely on the discovery of new use cases, experts say.

Since FedNow launched in July, nearly 140 financial institutions and 22 certified service providers have signed up for the network, according to a public register of users, a fraction of the nearly 10,000 institutions with access to the central bank's other payments and settlements services. But early adopters and former Fed staffers say the rollout has played out as expected and compares favorably to the trajectory of the private RTP network, which has amassed roughly 400 participants since 2017. Miriam Sheril, a former FedNow project manager at the Federal Reserve Banks of New York and Boston, said industry-wide adoption was never going to be instantaneous.



#### Other DXC BCM News

#### Webinar: Essential Evolution of Banking: How Banks Can Transform Testing using Al

On 1 November, DXC will host a virtual webinar on "How Banks Can Transform Testing using Al." in partnership with Tricentis. Financial services experts from DXC and Tricentis deep-dived to provide insights into how adding a layer of intelligence can transform key areas of testing such as test data management and test case design. This intelligent testing enables the safer, more predictable and faster change that customers, application teams, operations and regulators are all looking for. Register now.

### Webinar: Customer outcomes and generative AI in Financial Services

On 6 December, DXC will host a virtual webinar on "Customer outcomes and generative AI in Financial Services." in partnership with Nvidia, the world's most valuable chip company, which has come to dominate the market for chips used in AI systems. Financial services experts from DXC and Nvidia deepdived to provide insights into how Generative AI has raised the bar for customer outcomes by citing use cases and tangible business outcomes. Register now.

### DXC Gold Sponsor at the 6<sup>th</sup> World Digital Banking Summit, Berlin

DXC was the Gold Sponsor and exhibitor at the 6th World Digital Banking Summit in Berlin on 5-6 October. This was another fantastic event for our vertical.

As a follow up from our sponsorship and participation at the Banking Transformation Summit in London in June, Andy Haigh and Mohammed ("Khal") Khalid delivered their story of the bank of the future in a data-rich world in a keynote speech on the morning of the 5<sup>th</sup> of October, and Christian Valerius took part in a roundtable on the future of digital transformation in banking.

<u>Click here to watch the whole</u> keynote speech – we get to experience the full animation and story narration, and the reasoning why we have this vision for the bank of the future.

<u>Click here to watch the roundtable</u> discussion – very useful insights from Christian Valerius on why the transformation towards a data-driven organization is essential.

## PoV with AWS: Banks can improve scalability and leverage existing investments with a hybrid cloud strategy

Unlocking the power of hybrid cloud in Banking and Capital Markets. In today's financial landscape, a strategic move towards hybrid cloud is pivotal for scalability and maximizing existing investments. But the question remains: How to do it right?



Discover the answers in this insightful Point of View (PoV) by Dave Wilson from DXC Technology, and Steven Brucato and Steven Wong from Amazon Web Services (AWS). They share invaluable insights on choosing the right technology to meet the evolving demands of modern banking customers and maintain a competitive edge. Click here to read the full article.

### PoV: Banks benefit from managed multicloud services and platforms

Financial services companies use a neat blend of public, private and hybrid clouds to fuel digital transformation. However, getting things right requires carefully managing key functions such as security, data integration and application compatibility. But how to do it successfully?

Read this insightful Point of View by Dave Wilson, Andy Haigh, and Glen Ralph from DXC Technology as they find out why knowing how to integrate, orchestrate and control all the different technologies at play in a complex multicloud environment is important. Click here to read the full article.

### Article in The Times (UK): Essential to evolutionary: the phases of banking transformation

The transformation journey for banks is both challenging and essential to stay competitive in today's financial landscape. Dive into our exclusive Raconteur report for The Times and The Sunday Times, by Andy Haigh and Jeremy Donaldson where they explore the crucial steps needed for banks to unlock the full potential of digitization and move beyond industry norms. Click here to read more.

### DXC Blog: Digital banking needs the right data — not more data

Unlocking the power of data in banking. Banks aspire to harness the full potential of centralized customer data. But what's hindering their journey to this data destination? Gain invaluable insights from DXC experts Andy Haigh and Mohammed 'Khal' Khalid as they delve into the challenges faced by banks in achieving a 360-degree view of customer data and how to overcome them. Dive into the blog.

### DXC Blog: Al and data analytics for a data-rich future in banking

Al is revolutionizing Banking and Capital Markets. From fraud detection to risk assessment, it's transforming every facet of finance. Yet, many institutions grapple with scaling Al. Discover actionable insights from DXC experts David Rimmer and Dave Wilson on bridging the gap from experimentation to production. Dive into the blog here.

## Guest blog: Leveraging test automation and AI - How banks and building societies can innovate themselves into a sustainable future

Data analytics and generative AI are revolutionising the approach banks and building societies take to software development, testing, and delivery. But



what's the solution when they struggle to match the rate of transformation necessary to maintain a competitive edge? Read this blog to find out.

### Developing a data strategy in banking and capital markets

Data is king. Banks that know how to effectively harness it, manage it and monetize it can derive far better business insights, create significant growth opportunities and stay ahead of regulatory demands. Huge benefits can be reaped by developing a clear data strategy that defines how to access, ingest and connect the essential data that can drive positive business outcomes. Read DXC's latest paper to learn about how banks can get the most out of their data.

### **Executive Data Series: The banking customer in a data-** rich world

In the latest conversation of the Executive Data Series, DXC's Head of Banking and Capital Markets (EMEA) Andy Haigh sits down with Mohammed 'Khal' Khalid to discuss how banks can use data and analytics to transform financial services and improve the customer experience. **Listen to the full conversation (23 mins.) or read the transcript:** https://dxc.to/3NlsbXl



Should you have any questions on the round-up or a particular topic, please feel free to contact your DXC representative.

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#### **About DXC Technology**

DXC Technology (NYSE: DXC) helps global companies run their mission-critical systems and operations while modernizing IT, optimizing data architectures, and ensuring security and scalability across public, private and hybrid clouds. The world's largest companies and public sector organizations trust DXC to deploy services to drive new levels of performance, competitiveness, and customer experience across their IT estates. Learn more about how we deliver excellence for our customers and colleagues at **DXC.com**.

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