

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.



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Artificial Intelligence (AI)

Fed governor calls for transparency, accountability in Al models

American Banker: Federal Reserve Board Gov. Lisa Cook said <u>artificial</u> <u>intelligence</u> technology is poised to be a boon to innovation, productivity and even the labor market, but it will also come with new ethical obligations. Cook delivered a keynote address [last week] at the National Bureau of Economic Research's Economics of Artificial Intelligence Conference in Toronto. During her remarks, which were broadly supportive of the technology, she said humans would still be accountable for actions they take based on Al recommendations.

"Al makes predictions, but Al does not make choices," she said. "Ultimately, human beings are still in control." Cook also stressed the importance of ensuring transparency and accountability around Al-generated decisions.

"Importantly, in the policy arena — as well as health care, consumer finance, insurance, and many others — decisionmakers have legal and ethical duties to be deliberate about the effects their choices have on affected groups," she said. "In this context, an Al black-box with no insight into the decision-making process is of limited value."

<u>DeepMind's cofounder: Generative AI is just a phase. What's next is interactive AI.</u>

Note: Accessing the article may require a subscription

MIT Technology Review: DeepMind cofounder Mustafa Suleyman wants to build a chatbot that does a whole lot more than chat. In a recent conversation I had with him, he told me that generative AI is just a phase. What's next is interactive AI: bots that can carry out tasks you set for them by calling on other software and other people to get stuff done. He also calls for <u>robust</u> regulation—and doesn't think that'll be hard to achieve.

Suleyman is not the only one talking up a future filled with ever more autonomous software. But unlike most people he has a new billion-dollar company, Inflection, with a roster of top-tier talent plucked from DeepMind, Meta, and OpenAI, and—thanks to a deal with Nvidia—one of the biggest stockpiles of specialized AI hardware in the world. Suleyman has put his money—which he tells me he both isn't interested in and wants to make more of—where his mouth is.

Suleyman has had an unshaken faith in technology as a force for good at least since we first spoke in early 2016. He had just launched DeepMind Health and set up research collaborations with some of the UK's state-run regional health-care providers.



Maximize value through process mining and hyperautomation: strategies, synergies and the road ahead

DXC Technology: Process mining has surged with the advent of digital technologies such as RPA, ML and AI, amplifying the significance of streamlined processes for organizational achievement.

Processes, defined as sequences of tasks from initiation to completion aimed at achieving a specific objective, are the foundation of any organization's success. Continuous process improvement is a crucial function across organizations to optimize costs and enhance customer satisfaction. Since the early '80s, organizations have leveraged lean and Six Sigma methodologies to drive continuous improvement. The rise of digital technologies like robotic process automation (RPA), machine learning (ML) and artificial intelligence (AI) has spurred unprecedented growth in process mining.

According to the Gartner 2022 Magic Quadrant for Process Mining Tools report, the global process mining market size is expected to grow from \$463 million in 2021 to \$2.3 billion by 2028, at a Compound Annual Growth Rate (CAGR) of 50.1% during the forecast period.

Additionally, Google search trends show an approximately 220% increase in the search for 'process mining' from 2015 to 2023, indicating process mining is gaining popularity.

Al and data analytics for a data-rich future in banking

DXC Technology: Artificial intelligence is gaining traction right across the banking and capital markets (BCM) industry, touching almost every aspect of day-to-day banking functions: fraud detection, risk assessment, compliance and regulatory reporting and algorithmic trading. Banks also can deploy AI in operations – to automate email processing, for example – and in customer engagement to provide tailored advice and guidance. But a critical issue remains in applying AI successfully: how to close the gap between experimentation and production. Banks and other financial institutions are struggling to mainstream AI, industrialize it and make it work at scale.

Secrets of Applied Al

To reap the benefits of Al, banks need to know how to go successfully from proof of concept to production applications by addressing practical, organizational, technical and regulatory challenges. What paths should banks take to achieve these goals and improve business performance?



<u>CFPB issues guidance on credit denials that use artificial intelligence</u>

American Banker: The Consumer Financial Protection Bureau [CFPB] warned lenders of the requirement to provide specific and accurate reasons when denying credit to a consumer, reiterating the agency's skepticism of artificial intelligence and advanced algorithms in underwriting decisions.

[Last] Tuesday, the CFPB issued guidance on the use of artificial intelligence in underwriting and the explanations given to consumers who are denied credit. The bureau said that creditors are relying inappropriately on a checklist of reasons provided by the CFPB in sample forms. The bureau said that creditors instead must provide specific reasons and details to explain why a consumer is denied credit or why a credit limit was changed.

"Creditors must be able to specifically explain their reasons for denial. There is no special exemption for artificial intelligence," CFPB Director Rohit Chopra said in a press release. "Technology marketed as artificial intelligence is expanding the data used for lending decisions, and also growing the list of potential reasons for why credit is denied."

BigTech

Elizabeth Warren created a federal agency once. Can she do it again?

Vox: Stop me if you've heard this one before: Sen. Elizabeth Warren has an idea for a new federal agency that takes on some of the most powerful and valuable companies in the world, aiming to protect consumers from their abusive business practices.

You'd be forgiven for assuming I'm referring to the Consumer Financial Protection Bureau [CFPB], the federal agency that Warren is largely and deservedly <u>credited with creating</u>. No, this is about a new bill that would create another new agency: the <u>Digital Consumer Protection Commission Act</u>, or DCPC. Whereas the CFPB took on Big Banking, the DCPC aims to take on Big Tech, with a dedicated and specialized agency empowered to promulgate and enforce new regulations. Warren believes it will address some of Big Tech's greatest harms, which the US has thus far <u>failed</u> to rein in any other way.

"Big Tech giants exploit people's data, invade Americans' privacy, and crush competition," Warren told me in an interview. "The tech industry has shut down every attempt to regulate it or impose liability on it." She added: "Enough is enough. We cannot let a handful of unelected Big Tech billionaires govern our lives and govern our democracy."



DXC's perspective

Ransomware is now a daily threat and occurrence for organizations and companies of all sizes worldwide. In its updated white paper published earlier this

month https://www.ncsc.gov.uk/whitepa
per/ransomware-extortion-and-the-cyber-crime-ecosystem, NCSC [the National Cyber Security
Centre] describes ransomware as the

Centre] describes ransomware as the "biggest development in cyber crime since the NCSC report began in 2017 and also the most significant, serious and organized crime threat faced by the UK". While there are many different cybersecurity strategies that companies can adopt, our advice is to start with a robust backup process and develop plans and policies in advance so that you are able to react in a timely manner, should you need to.

John Mundell Sales Lead - Europe, Security DXC Technology

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

Cybersecurity

Cyber insurance claims spiked in first half of 2023 as ransomware attacks surged: report

The Record: A cyber insurance firm reported a significant jump in the number of claims during the first half of the year, adding that damage caused by attacks has also increased.

An <u>analysis</u> from San Francisco-based Coalition found that ransomware was the "largest driver of the increase in claims frequency," which was up 12% on last year through the end of June. Overall, ransomware was involved in nearly 1 in 5 cyber incidents involving insurance claims, with Royal, BlackCat and LockBit 3.0 the three most common variants.

May was a particularly busy month, involving "the most ransomware claims in a single month in Coalition history."

"After trending downward for 18 months, ransomware appeared to have fallen out of favor among threat actors," the report's authors wrote. "However, recent spikes in both the frequency and severity of ransomware claims indicate threat actors are unwilling to pass up on such highly lucrative attacks."

Cyber Ready? Australian Businesses Rise to the Challenge.

HSF [Herbert Smith Freehills]: From engaging regulators, the board and government to managing communications and compliance, the list of responsibilities has grown long. Australian organisations face a perilous, rapidly evolving cyber threat landscape. Over the last 12 months, the national discourse has shifted into hyperdrive in the wake of global geopolitical instability and a spate of high-profile attacks. Businesses are also subject to increased regulatory scrutiny as well as growing expectations from government, consumers, and other stakeholders.

As a wealthy nation committed to digitalisation, Australia is a prime target for a new wave of cyber threat actors. The consequences of cyber-attacks are soaring, along with their scale, frequency, and sophistication.

Encryption events can bring businesses to a standstill. Data breaches undermine consumer confidence and cause real harm through identity theft and financial loss. There is even the potential for operational shutdowns to bring vital infrastructure such as hospitals, airports, and utilities to a halt. Compounding matters, our adversaries are continually adapting and looking to leverage new capabilities such as generative AI.



Data

<u>Digital banking needs the right data — not</u> more data

DXC Technology: Every bank wants to achieve a centralized and structured view of their customer data, as well as the powerful business benefits such a view can deliver. So what's stopping banks from reaching this data destination? And what can they do to get themselves back on course?

The potential benefits of achieving this data view are profound. They include the ability to create and launch innovative products quickly. The ability to offer zero-time onboarding. And the potential for transforming an old-fashioned bank into a new-age digital wallet, one that "understands" the customer and offers them both long- and short-term financial products.

These benefits are not unique to banking. Yet in comparison with other industries, banking has found the goal of bringing together data from different departments of the organization to be especially elusive. To achieve a true 360-degree view of customers, bank data needs to be not only integrated — a serious challenge in itself — but also correctly structured and properly secured.

Leading-edge banks will also gain the ability to integrate customer data from external sources. That might include data from the customer's e-car, smart home and online shopping.

DXC's perspective

Klarna has never just been about payments. It's not just that Klarna makes money through affiliate marketing: "Merchants pay Klarna to be seen higher up on the list and for other forms of visibility like being featured in push notifications to consumers. Around 70% to 80% of sales through the Klarna app originate through its search function". It is also that BNPL platforms such as Klarna enable 'Buy Now, Return Later' (BNRL). This mode of shopping allows customers to buy and try out items before deciding whether to keep them – which is why clothing has historically been Klarna's largest sector. Price comparisons and discount notifications make up the broader offer to shoppers.

David Rimmer Industry Advisor, BCM DXC Technology

FinTech

As Klarna aspires to be a global bank, affiliate marketing is its cash cow

Sifted: [In mid-September], Swedish buy now, pay later (BNPL) scaleup Klarna brought 4,000 employees together in Stockholm; social media showed people dressed up in bandanas or Klarna pink — <u>there were even a few Minions</u>.

The bash was in part to celebrate the fintech's return to profitability. Klarna posted a small monthly net profit in May — its first since August 2020 — and has forecasted more profits in the coming months.

Since its founding in 2005, most of those profits have come from its core payments product, which makes money from partner merchants and late fees. Eight years after its US launch, which contributed to its <u>multiplying losses</u> for years, Klarna has outpaced both US BNPL giants Affirm and Afterpay by its acceptance in the top 500 ecommerce merchants in the US, according to a Morgan Stanley note.

But Klarna has almost been too successful in providing instalment payment plans to consumers at online checkouts and competitors from Apple to PayPal are circling. With increased costs for BNPL and greater competition, Klarna has been developing another high margin revenue stream that also goes hand in hand with its bigger vision – "to become the world's favourite way to shop".



Payments

Big Tech's Role in Contactless Payments: Analysis of Mobile Device Operating Systems and Tap-to-Pay Practices

CFPB: In jurisdictions around the world, consumers, small businesses, financial institutions, and policymakers are recognizing the benefits of open ecosystems in the digital world. Open ecosystems facilitate easy switching and consumer choice by leveraging both platform interoperability and data portability.

As the United States shifts toward open banking through data portability in consumer finance, the Consumer Financial Protection Bureau (CFPB) is paying greater attention to the potential for platform interoperability, particularly how consumers and those offering financial products and services can access different payment rails.

This issue spotlight focuses on the evolution of payments in point-of-sale (POS) purchases and the role that mobile device operating systems play. Given the continued shift toward the use of contactless payments on mobile devices like smartphones and wearables, there is now readily available technology for consumers to securely make POS payments through different apps and services.

However, this evolution means that tech companies are playing a powerful role in determining consumers' payment options.

DXC's perspective

Biometric payment authentication is nothing new — and in fact, has been discussed for decades — but production costs and cardholder adoption challenges limited its uptake. However, industry research suggests that biometrics cards will become more prevalent over the next 5 years, as issuers look to reduce fraud and cardholders are more receptive to authenticate through fingerprint/facial recognition. In fact, laptops and mobile phones have used biometrics for many years, with the iPhone TouchID being introduced in 2013 — demonstrating consumer acceptance of this tech.

Paul Sweetingham Global Capability Leader, Banking BPO & CX DXC Technology

Strong Authentication, Secure Payments.

Note: Accessing the article may require a subscription

David Birch: Around three-quarters of American adults say that they are "not at all" comfortable with biometric payments such as the Amazon palm scan. While that is down five percentage points in the last four years, it's still pretty high. So are Amazon and others wasting their time? I think not.

Amazon has announced that its palm recognition biometric authentication service, Amazon One, will be used for payment, identification, loyalty and entry and more than 500 Whole Foods and Amazon Fresh locations across America by the end of this year.

They are not alone in looking at biometric payments. J.P. Morgan also intends to pilot biometrics-based payments using both palm and face identification with select retailers in the U.S. What is particularly appealing about this type of rapid biometric authentication is that it enables a retailer to combine both an authenticated payment transaction and an authenticated loyalty transaction in one "identity ceremony" so that the customer can complete both transactions without needing to present cards, a phone or anything else.



Technology

What's next for the world's fastest supercomputers

Note: Accessing the article may require a subscription

MIT Technology Review: It can be difficult to wrap your brain around the number-crunching capability of the world's fastest supercomputer. But computer scientist Jack Dongarra, of the University of Tennessee, puts it this way: "If everybody on Earth were to do one calculation per second, it would take four years to equal what that computer can do in one second."

The supercomputer in question is called Frontier. It takes up the space of two tennis courts at Oak Ridge National Laboratory in the eastern Tennessee hills, where it was unveiled in May 2022.

Here are some more specs: Frontier uses approximately 50,000 processors, compared with the most powerful laptop's 16 or 24. It consumes 20 million watts, compared with a laptop's 65 or so. It cost \$600 million to build.

When Frontier came online, it marked the dawn of so-called exascale computing, with machines that can execute an exaflop—or a quintillion (1018) floating point operations a second. Since then, scientists have geared up to make more of these blazingly fast computers: several exascale machines are due to come online in the US and Europe in 2024.

But speed itself isn't the endgame.

Quantum Untangled: Why post-quantum encryption isn't really about quantum

Note: Accessing the article may require a subscription

TechMonitor: [Early September] saw some of the brightest minds in the field of code-making and breaking gather at Oxford University's Post-Quantum Cryptography Summit. The main topic of discussion, naturally, was the publication of the latest set of <u>cryptography standards</u> by the US National Institute of Standards and Technology (NIST) — cryptographic algorithms that, their creators ardently hope, will protect data from being exposed by the next generation of quantum computers.

What was especially surprising about the summit, though, was just how detached quantum computing is from the mainstream discussions taking place in cryptography. Yes, the latest NIST standards are intended to protect us in a post-quantum era where any nation-state or hacking group with access to a quantum computer will be able to crack open messages or websites protected by RSA encryption.

However, the problem is that cryptographers do not have access to a quantum computer powerful enough to test any new algorithms they think are capable of resisting decryption *by* a quantum computer. Therefore, to paraphrase Cillian Murphy reciting lines by Christopher Nolan paraphrasing J. Robert Oppenheimer, theory will only take you so far.



Other DXC BCM News

DXC Gold Sponsor at the 6th World Digital Banking Summit, Berlin

DXC is the Gold Sponsor and exhibitor at the upcoming 6th World Digital Banking Summit in Berlin on 5-6 October. This is set to be another fantastic event for our vertical and we look forward to seeing some of the team there.

As a follow up from our sponsorship and participation at the Banking Transformation Summit in London in June, Andy Haigh and Mohammed ("Khal") Khalid will carry on their story of the bank of the future in a data-rich world in a keynote speech on the morning of the 5th of October. Register. Come and meet us!.

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.

Webinar: Essential Evolution of Banking: How Banks Can Scale Generative Al for Growth

On 1 November, DXC will host a virtual webinar on "How Banks Can Scale Generative AI for Growth." 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.

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

Data analytics and generative Al 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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