Breaking Analysis is a weekly editorial program combining knowledge from SiliconANGLE’s theCUBE with spending data from Enterprise Technology Research. Branded as theCUBE Insights, Powered by ETR, the program is our opportunity to share independent, unfiltered editorial with SiliconANGLE, theCUBE and Wikibon communities. The program and conclusions we produce are data-driven, tapping ETR’s proprietary spending data [...]

Episode 143 - Further defining Supercloud With tech leaders VMware, Snowflake, Databricks & others - At our inaugural Supercloud22 event we sought community input to evolve the concept of a supercloud by iterating on the definition, the salient attributes and examples of what is and is not a supercloud. We asked several technologists including experts from VMware, Snowflake, Databricks, HashiCorp, Confluent, Intuit, Cohesity and others to help test the supercloud definition, operational models, service models and principles.

In this Breaking Analysis we unpack our discussions with these technology leaders and apply their input to iterate the definition of supercloud. We then go in-depth to examine Snowflake’s Data Cloud architecture as a leading example of supercloud.

Watch the full video analysis.

Episode 142 - What we hope to learn at Supercloud22 - The term supercloud is relatively new, but the concepts behind it have been bubbling for years. Early last decade when NIST put forth its original definition of cloud computing, it said services had to be accessible over a public network...essentially cutting the on-prem crowd out of the conversation. A guy named Chuck Hollis, a CTO at EMC and prolific blogger objected to that criterion and laid out his vision for what he termed a private cloud. In that post he showed a workload running both on premises and in a public cloud, sharing the underlying resources in an automated and seamless manner - what later became more broadly known as hybrid cloud.

That vision, as we now know, really never materialized and we were left with multi-cloud...sets of largely incompatible and disconnected cloud services running in separate silos. The point is, what Hollis put forth - i.e. the ability to abstract underlying infrastructure complexity and run workloads across multiple heterogeneous estates with an identical experience - is what supercloud is all about.

Watch the full video analysis.

Episode 141 - How the cloud is changing security defenses in the 2020s - AThe rapid pace of cloud adoption has changed the way organizations approach cybersecurity. Specifically, the cloud is increasingly becoming the first line of cyber defense. As such, along with communicating to the board and creating a security-aware culture, the CISO must ensure that the shared responsibility model is being applied properly. The DevSecOps team has emerged as the critical link between strategy and execution, while audit becomes the “free safety” in the equation - i.e. the last line of defense.

In this Breaking Analysis we share our puts and takes from AWS re:Inforce with an update on the latest
hyperscale IaaS market shares; and insights from ETR survey data. We'll also dig deeper into some technical aspects of AWS Nitro, a system we believe is one of AWS’ secret weapons, with a focus on confidential computing and what it means for the future of systems architecture.

Watch the full video analysis.

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**Episode 140 – AWS re:Inforce marks a summer checkpoint on cybersecurity** – After a two year hiatus, AWS re:Inforce is back on as an in-person event in Boston next week. Like the all-star break in baseball, re:Inforce gives us an opportunity to evaluate the cybersecurity market overall, the state of cloud security and what AWS is up to in the sector.

In this Breaking Analysis, we'll share our view of what's changed since our last cyber update in May, we'll look at the macro environment, how it's impacting cybersecurity plays in the market, what the ETR data tells us and what to expect at next week's AWS re:Inforce.

Watch the full video analysis.

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**Episode 139 – Amping it up with Frank Slootman** – Organizations have considerable room to improve their performance without making expensive changes to their talent, structure or fundamental business model. You don't need a slew of consultants to tell you what to do. You already know. What you need is to immediately ratchet up expectations, energy, urgency and intensity. Fight mediocrity every step of the way. Amp it up and the results will follow.

This is the fundamental premise of a hard hitting new book written by Frank Slootman, CEO of Snowflake, and published earlier this year. It’s called, Amp it Up, Leading for Hypergrowth by Raising Expectations, Increasing Urgency and Elevating Intensity.

At Snowflake Summit last month, I was invited to interview Frank on stage about his book. I've read it several times and if you haven't picked it up, you should. Even if you have read it, in this Breaking Analysis we'll dig deeper into the book and share some clarifying insights and unpublished nuances of Frank's philosophy. You'll hear directly from Slootman himself with excerpts from my one on one conversation with him.

Watch the full video analysis.

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**Episode 138 – Answering the top 10 questions about SuperCloud** – As we exited the isolation economy last year, supercloud is a term we introduced to describe something new that was happening in the world of cloud. In this Breaking Analysis we address the ten most frequently asked questions we get on supercloud.

Watch the full video analysis.

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**Episode 137 – H1 of '22 was ugly...H2 could be worse...Here's why we're still optimistic** – After a two year epic run in tech, 2022 has been an epically bad year in the market. Through yesterday, the Nasdaq composite is down 30%, the S&P 500 is off 21%, the DJIA down 16% and the poor HODLers of BTC have had to endure a nearly 60% decline year to date.
Episode 136 - Tech Spending Intentions are Holding Despite Macro Concerns - Much of the energy around data innovation that dispersed with the decline of Hadoop's relevance is coalescing in a new ecosystem spawned by the ascendency of Snowflake's Data Cloud. What was once seen as a simpler cloud data warehouse and good marketing with Data Cloud, is evolving rapidly with new workloads, a vertical industry focus, data applications, monetization and more. The question is will the promises of data be fulfilled this time around or is it same wine, new bottle?

Watch the full video analysis.

Episode 135 - Snowflake Summit 2022...All About Apps & Monetization - Much of the energy around data innovation that dispersed with the decline of Hadoop’s relevance is coalescing in a new ecosystem spawned by the ascendency of Snowflake’s Data Cloud. What was once seen as a simpler cloud data warehouse and good marketing with Data Cloud, is evolving rapidly with new workloads, a vertical industry focus, data applications, monetization and more. The question is will the promises of data be fulfilled this time around or is it same wine, new bottle?

Watch the full video analysis.

Episode 134 - How Snowflake Plans to Make Data Cloud a De Facto Standard - When Frank Slootman took ServiceNow public, many people undervalued the company, positioning it as just a better help desk tool. It turns out the firm actually had a massive TAM expansion opportunity in ITSM, HR, logistics, security, marketing and customer service management. NOW’s stock price followed the stellar execution under Slootman and CFO Mike Scarpelli’s leadership. When they took the reins at Snowflake, expectations were already set that they’d repeat the feat but this time, if anything, the company was overvalued out of the gate.

It can be argued that most people didn’t really understand the market opportunity any better this time around. Other than that it was a bet on Slootman’s track record of execution…and data. Good bets; but folks really didn’t appreciate that Snowflake wasn’t just a better data warehouse. That it was building what the company calls a data cloud…and we’ve termed a data supercloud.

In this Breaking Analysis and ahead of Snowflake Summit, we’ll do four things: 1) Review the recent narrative and concerns about Snowflake and its value; 2) Share survey data from ETR that will confirm almost precisely what the company’s CFO has been telling anyone who will listen; 3) Share our view of what Snowflake is building - i.e. trying to become the de facto standard data platform; and 4) Convey our expectations for the upcoming Snowflake Summit next week at Caesar’s Palace in Las Vegas.

Watch the full video analysis.

Episode 133 - MongoDB Sends Strong Signals Despite Cautious Macro Tones - Earnings season has shown a conflicting mix of signals for software companies. Most firms are expressing
caution over macro headwinds citing a combination of Ukraine, inflation, interest rates, EMEA softness, currency, supply chain and general demand for technology. But MongoDB, along with a few other names appeared more sanguine, thanks to a beat in the recent quarter and a cautious but upbeat outlook for the near term.

In this Breaking Analysis, ahead of MongoDB World 2022, we drill into the company’s business and what ETR survey data tells us in the context of overall demand and the patterns from other software companies.

Watch the full video analysis.

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**Episode 132 - Broadcom, Taming the VMware Beast** - In the words of CUBE analyst and former CTO David Nicholson, Broadcom buys old cars. Not to restore them to their original beauty...nope...they buy classic cars to extract the platinum that’s inside the catalytic converter. Broadcom’s planned $61B acquisition of VMware will mark yet another new era for the virtualization leader, a mere seven months after finally getting spun out as a fully independent company by Dell. For VMware this means a dramatically different operating model, with financial performance and shareholder value creation as the dominant and perhaps sole agenda. For customers it will mean a more focused portfolio, less aspirational vision pitches and most certainly higher prices.

In this Breaking Analysis we’ll share data, opinions and customer insights about this blockbuster deal and forecast the future of VMware, Broadcom and the broader ecosystem.

Watch the full video analysis.

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**Episode 131 - Supercloud is becoming a thing** - Last year we noted in a Breaking Analysis that the cloud ecosystem is innovating beyond the notion of multicloud. We’ve said for years that multicloud is really not a strategy but rather a symptom of multivendor. We used the term supercloud to describe an abstraction layer that resides above and across hyperscale infrastructure, connects on premises workloads and eventually stretches to the edge. Our premise is that supercloud goes beyond running services in native mode on each individual cloud. Rather supercloud hides the underlying primitives and APIs of the respective cloud vendors and creates a new connection layer across locations.

Since our initial post, we’ve found many examples within the ecosystem of technology companies working on so-called supercloud in various forms. Including some examples that actually do not try to hide cloud primitives but rather are focused on creating a consistent experience for developers across the devsecops tool chain, while preserving access to low level cloud services.

In this Breaking Analysis we share some recent examples of supercloud that we’ve uncovered. We also tap theCUBE network to access direct quotes about supercloud from the many CUBE guests we’ve recently had on the program. Here we test the concept’s technical and business feasibility. We’ll also post some recent ETR data to put into context some of the players we think are going after this opportunity and where they’re at in their supercloud buildout.

Watch the full video analysis.

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**Episode 130 - Are Cyber Stocks Oversold or Still too Pricey?** - Cybersecurity stocks have been
sending mixed signals as of late...Mostly negative like much of tech. But some, such as Palo Alto Networks, despite a tough go of it recently, have held up better than most tech names. Others like CrowdStrike had been outperforming broader tech in March but then flipped in May. Okta’s performance was somewhat tracking along with CrowdStrike for most of the past several months but then the Okta hack changed the trajectory of that name. Zscaler has crossed the critical $1B ARR revenue milestone and sees a path to $5B, but the company’s stock fell sharply after its last earnings report and has been on a downtrend since last November...Meanwhile CyberArk’s recent beat and raise was encouraging and the stock acted well after its last report.

Security remains the #1 initiative priority amongst IT organizations and the spending momentum for many high flying cyber names remains strong. So what gives in cybersecurity? In this Breaking Analysis we focus on security and will update you on the latest data from ETR to try and make sense out of the market and read into what this all means in both the near and long term for some of our favorite names in the sector.

Watch the full video analysis.

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**Episode 129 - What you May not Know About the Dell Snowflake Deal** – In the pre-cloud era, hardware companies would run benchmarks showing how database and application performance ran best on their systems relative to competitors and previous generation boxes. They would make a big deal out of it and the independent software vendors would do a “golf clap” in the form of a joint press release. It was a game of leapfrog amongst hardware competitors that became pretty commonplace over the years. The Dell-Snowflake deal underscores that the value prop between hardware companies and ISVs is changing and has much more to do with distribution channels and the amount of data that lives on-prem in various storage platforms. For cloud-native ISVs like Snowflake, they are realizing that despite their cloud-only dogma, they have to grit their teeth and deal with on-premises data or risk getting shut out of evolving data architectures.

In this Breaking Analysis we unpack what little is known about the Snowflake announcement from Dell Technologies World... and discuss the implications of a changing cloud ecosystem landscape. We’ll also share some new ETR data for cloud and database platforms that shows Snowflake has actually entered the earth’s orbit when it comes to spending momentum on its platform.

Watch the full video analysis.

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**Episode 128 - The Ever expanding Cloud Continues to Storm the IT Universe** – Despite a mixed bag of earnings reports from tech companies, negative GDP growth this past quarter and rising inflation...the cloud continues its relentless expansion on the IT landscape. AWS, Microsoft and Alphabet have all reported earnings and, when you include Alibaba’s cloud in the mix, the big 4 hyperscalers are on track to generate $167B in revenue this year based on our projections. But as we’ve said many times the definition of cloud is expanding. And hybrid environments are becoming the norm at major organizations. We’re seeing the largest enterprise tech companies focus on solving for hybrid and every public cloud company now has a strategy to bring their environments closer to where customers’ workloads live - in data centers and the edge.

Hello and welcome to this week’s Wikibon CUBE Insights, Powered by ETR. In this Breaking Analysis we’ll update you on our latest cloud projections and outlook. We’ll share the latest ETR data and some
commentary on what’s happening in the “hybrid zone” of cloud.

Watch the full video analysis.

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**Episode 127 - Does Hardware Still Matter** - The ascendency of cloud and SaaS has shone new light on how organizations think about, pay for, and value hardware. Once-sought-after skills for practitioners with expertise in hardware troubleshooting, configuring ports, tuning storage arrays and maximizing server utilization have been superseded by demand for cloud architects, DevOps pros and developers with expertise in microservices, container app development and similar skills. Even a company like Dell, the largest hardware company in enterprise tech, touts that it has more software engineers than those working in hardware. It begs the question: Is hardware going the way of COBOL? Well, not likely — software has to run on something. But the labor and skills needed to deploy, troubleshoot and manage hardware infrastructure is shifting quite dramatically.

At the same time we’ve seen the value flow also changing in hardware. Once a world dominated by x86 processors, value is flowing to alternatives like Nvidia and Arm-based designs. Moreover, other components like NICs, accelerators and storage controllers are becoming more advanced, integrated and increasingly important.

The question is: Does it matter? If so, why does it matter and to whom? What does it mean to customers, workloads, OEMs and the broader society?

In this Breaking Analysis we try to answer these questions and to do so we’ve organized a special CUBE Power Panel of industry analysts and experts to address the question: Does Hardware (Still) Matter?

Watch the full video analysis.

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**Episode 126 - Technology & Architectural Considerations for Data Mesh** - The introduction and socialization of data mesh has caused practitioners, business technology executives and technologists to pause and ask some probing questions about the organization of their data teams, their data strategies, future investments and their current architectural approaches. Some in the technology community have embraced the concept, others have twisted the definition while still others remain oblivious to the momentum building around data mesh.

We are in the early days of data mesh adoption. Organizations that have taken the plunge will tell you aligning stakeholders is a non-trivial effort. But one that is necessary to break through the limitations that monolithic data architectures and highly specialized teams have imposed over frustrated business and domain leaders. However, practical data mesh examples often lie in the eyes of the implementer and may not strictly adhere to the principles of data mesh. Part of the problem is the lack of open technologies and standards that can accelerate adoption and reduce friction.

This is the topic of today’s Breaking Analysis where we investigate some of the key technology and architectural questions around data mesh. To do so, we welcome back the founder of data mesh and Director of Emerging Technologies at ThoughtWorks, Zhamak Dehghani.

Watch the full video analysis.
Episode 125 - Customer ripple effects from the Okta breach are worse than you think - The recent security breach of an Okta third party supplier has been widely reported. The criticisms of Okta’s response have been harsh and the impact on Okta’s value has been obvious. Investors shaved about $6B off the company’s market cap during the week the hack was made public. We believe Okta’s claim that the customer technical impact was “near zero,” may be semantically correct. However, based on customer data, we feel Okta has a blind spot. There are customer ripple effects that require clear action, which are missed in Okta’s public statements. Okta’s product portfolio remains solid. It is a clear leader in the identity space. But in our view, one part of the long journey back to credibility requires Okta to fully understand and recognize the true scope of this breach on its customers.

In this week’s Breaking Analysis we welcome our ETR colleague Erik Bradley to share new data from the community. In addition, we’ll analyze some of the statements made by Okta CEO Todd McKinnon in an interview with Emily Chang on Bloomberg to see how they align with what customers tell us.

Watch the full video analysis.

Episode 124 - New Data Signals C Suite Taps the Brakes on Tech Spending - Fresh survey data from ETR shows a clear deceleration in spending and a more cautious posture from technology buyers. Just this week we saw sell side downgrades in hardware companies like Dell and HP; and revised guidance from high flier UiPath, citing exposure to Russia, Europe and certain sales execution challenges. But these headlines we think are a canary in the coal mine pointing to broader tech spending softness. According to ETR analysis and channel checks in theCUBE community, the real story is these issues are not isolated. Rather we’re seeing signs of caution from buyers across the board in enterprise tech.

In this Breaking Analysis we are the bearers of bad news, relatively speaking. We’ll share a first look at new data that suggest a tightening in tech spending, calling for 6% growth this year, which is below our January prediction of 8% for 2022.

Watch the full video analysis.

Episode 123 - Governments Should Heed the History of Tech Antitrust Policy - There are very few political issues that get bipartisan support these days, never mind consensus spanning geopolitical boundaries. But whether we’re talking across the aisle or over the pond, there seems to be common agreement that the power of big tech firms should be regulated. However the government’s track record when it comes to antitrust aimed at tech is mixed, at best. History shows that market forces, rather than public policy, have been much more effective at curbing monopoly power in the technology industry. Moreover, the standard for antitrust action has always been demonstrating consumer harm. Many of today’s policy makers are challenging that notion and using market dominance and the potential for consumer harm as the new benchmark for intervention.

In this week’s Breaking Analysis we welcome in frequent CUBE contributor David Moschella, author and senior fellow at the Information Technology and Innovation Foundation. We explore several issues including the efficacy of governments’ antitrust actions against big tech, what types of remedies have been and can be most effective and a first pass assessment of the new rules EU regulators just agreed to try and rein in big tech companies.

Watch the full video analysis.
**Episode 122 - Snowflake’s Wild Ride** – Snowflake...they love the stock at 400 and hate it at 165. That’s the nature of the business isn’t it? Especially in this crazy cycle over the last two years of lockdowns, free money, exploding demand and now rising inflation and rates. But with the Fed providing some clarity on its actions, the time has come to really look at the fundamentals of companies and there’s no tech company more fun to analyze than Snowflake.

In this breaking analysis we take look at the action of Snowflake’s stock since its IPO, why it’s behaved the way it has, how some sharp traders are looking at the stock and most importantly, what customer demand looks like.

Watch the full video analysis.

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**Episode 121 - Pat Gelsinger has the Vision Intel Just Needs Time, Cash & a Miracle** – Intel’s future would be a disaster without Pat Gelsinger. Even with his clear vision, fantastic leadership, deep technical and business acumen and amazing positivity, the company’s future is in serious jeopardy. It’s the same story we’ve been telling for years. Volume is king in the semiconductor industry and Intel no longer is the volume leader. Despite Intel’s efforts to change that dynamic with several recent moves, including making another go at its foundry business, the company is years away from reversing its lagging position relative to today’s leading foundries and design shops. Intel’s best chance to survive as a leader in our view will come from a combination of a massive market, continued supply constraints, government money and luck - perhaps in the form of a deal with Apple in the mid- to long term.

In this Breaking Analysis we’ll update you on our latest assessment of Intel’s competitive position and unpack nuggets from the company’s February investor conference.

Watch the full video analysis.

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**Episode 120 - RPA has Become a Transformation Catalyst, Here’s What’s New** – In its early days, robotic process automation emerged from rudimentary screen scraping, macros and workflow automation software. Once a script-heavy and limited tool that was almost exclusively used to perform mundane tasks for individual users, RPA has evolved into an enterprise-wide megatrend that puts automation at the center of digital business initiatives.

In this Breaking Analysis we present our quarterly update of the trends in RPA and share the latest survey data from Enterprise Technology Research.

Watch the full video analysis.

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**Episode 119 - Cyber Stocks Caught in the Storm While Private Firms Keep Rising** – The pandemic precipitated what is shaping up to be a permanent shift in cyber security spending patterns. As a direct result of hybrid work, CISOs have invested heavily in endpoint security, identity access management, cloud security and further hardening the network beyond the HQ. Moreover, the need to build security into applications from the start, rather than bolting protection on as an afterthought, has led to vastly heightened awareness around DevSecOps.
Finally, attacking security as a data problem with automation and AI is fueling new innovations in cyber products and services; and is spawning well-funded, disruptive startups.

In this Breaking Analysis we present our quarterly findings on the security sector. We’ll share the latest ETR survey data, identify the companies with customer spending momentum and share some of the market movers.

Watch the full video analysis.

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**Episode 118 - The Improbable Rise of Kubernetes** - The rise of Kubernetes came about through a combination of forces that were in hindsight, quite a long shot. AWS’ dominance created momentum for cloud native application development and the need for simpler experiences beyond easily spinning up compute as a service. This wave crashed into innovations from a startup named Docker and a reluctant open source benefactor in Google that needed a way to change the game on Amazon in the cloud. Factor in Red Hat, which needed a path beyond Linux and was just about to opt for an alternative to Kubernetes to power OpenShift. Finally, figure out a governance structure to herd all the cats in the ecosystem so you can win out over other competition and create a de facto standard. Make all that happen and you get the remarkable ascendancy of Kubernetes.

Such was the story unveiled recently in a new two-part documentary series from Honeypot simply titled “Kubernetes.” In this Breaking Analysis we tap the back stories of this documentary, which explains the improbable events leading to the creation of Kubernetes. We’ll share commentary from early Kubernetes committers and key players who came on theCUBE to piece together how it all happened. Finally, we’ll present new survey data from ETR on containers.

Watch the full video analysis.

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**Episode 117 - What to Expect in Cloud 2022 & Beyond** - We’ve often said that the next ten years in cloud computing won’t be like the last ten. Cloud has firmly planted its footprint on the other side of the chasm with the momentum of the entire multi-trillion dollar technology business behind it. Both sellers and buyers are leaning in by adopting cloud technologies and many are building their own value layers on top of cloud. In the coming years we expect innovation will continue to coalesce around the big 3 U.S. clouds, plus Alibaba in APAC, with the ecosystem building value on top of the hardware, software and tools provided by the hyperscalers. Importantly, we don’t see this as a race to the bottom. Rather our expectation is that the large public cloud players will continue to take cost out of their platforms through innovation, automation and integration. Other cloud providers and the ecosystem, including traditional IT buyers, will leverage hyperscale clouds and mine opportunities in their respective markets. This is not a zero sum game.

In this Breaking Analysis we’ll update you on our latest projections in the cloud market, share some new ETR survey data with some surprising nuggets; and drill into the important cloud database landscape.

Watch the full video analysis.

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**Episode 116 - Securing Snowflake** - The amount of data ingested into a data warehouse
overwhelmed the system. Every time Intel came out with a new microprocessor, practitioners would “chase the chips” in an effort to try and compress the overly restrictive elapsed time to insights. This cycle repeated itself for decades.

Cloud data warehouses generally and Snowflake specifically changed all this. Not only were resources virtually infinite, but the ability to separate compute from storage permanently altered the cost, performance, scale and value equation. But as data makes its way into the cloud and is increasingly democratized as a shared resource across clouds - and at the edge - practitioners must bring a SecDevOps mindset to securing their cloud data warehouses.

This Breaking Analysis takes a closer look at the fundamentals of securing Snowflake. An important topic as data becomes more accessible and available to a growing ecosystem of users, customers and partners. To do so we welcome two guests to this episode. Ben Herzberg is an experienced hacker, developer and an expert in several aspects of data security. Yoav Cohen is a technology visionary and currently serving as CTO at Satori Cyber.

Watch the full video analysis.

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**Episode 115 - Enterprise Technology Predictions 2022**  - The pandemic has changed the way we think about, and predict the future. As we enter the third year of COVID, we see the significant impact it’s had on technology strategies, spending patterns and company fortunes. Much has changed and while many of these changes were forced reactions to a new abnormal, the trends we’ve seen over the past twenty-four months have become more entrenched and point the way to what’s ahead in the technology business.

In this Breaking Analysis we welcome our data partner and colleague Erik Porter Bradley from ETR and we put forth our annual predictions for enterprise technology in 2022 and beyond. We’ll do our best to backup our predictions specific supporting data and more granular detail that can be measured as accurate or not. Please refer to the grading of our 2021 predictions to judge for yourself how we did last year.

Watch the full video analysis.

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**Episode 114 - Cyber, Blockchain & NFTs Meet the Metaverse**  - When Facebook changed its name to Meta last fall it catalyzed a chain reaction throughout the tech industry. Software firms, gaming companies, chip makers, device manufacturers and others have joined in the hype machine. It’s easy to dismiss the metaverse as futuristic hyperbole, but do we really believe that tapping on a smartphone, staring at a screen or two dimensional Zoom meetings are the future of how we work, play and communicate? As the Internet itself proved to be larger than we ever imagined, it’s very possible that the combination of massive processing power, cheap storage, AI, blockchains, crypto, sensors, AR/VR, brain interfaces and other emerging technologies will combine to create new and unimaginable consumer experiences; and massive wealth for creators of the metaverse.

In this Breaking Analysis we explore the intersection of cybersecurity, blockchain, crypto currency, NFTs and the emerging metaverse. To do so we welcome in cyber expert, hacker, gamer, NFT expert and founder of Ore System, Nick Donarski.

Watch the full video analysis.
Breaking Analysis with Dave Vellante

Episode 113 - Analyst Predictions 2022: The Future of Data Management  - In the 2010's, organizations became keenly aware that data would become the critical ingredient in driving competitive advantage, differentiation and growth. But to this day, putting data to work remains a difficult challenge for many if not most organizations. As the cloud matures it has become a game changer for data practitioners by making cheap storage and massive processing power readily accessible. We’ve also seen better tooling in the form of data workflows, streaming, machine intelligence/AI, developer tools, security, observability, automation, new databases and the like. These innovations accelerate data proficiency but at the same time add complexity for practitioners. Data lakes, data hubs, data warehouses, data marts, data fabrics, data meshes, data catalogs and data oceans are forming, evolving and exploding onto the scene.

In an effort to bring perspective to this sea of optionality, we’ve brought together some of the brightest minds in the data analyst community to discuss how data management is morphing and what practitioners should expect in 2022 and beyond.

Watch the full video analysis.

Episode 112 - Grading our 2021 Predictions  - Predictions are all the rage this time of year. On December 29th, 2020, in collaboration with Erik Porter Bradley of Enterprise Technology Research, we put forth our predictions for 2021. The focus of our prognostications included tech spending, remote work, productivity apps, cyber, IPOs, SPACs, M&A, data architecture, cloud, hybrid cloud, multi-cloud, AI, containers, automation and semiconductors. We covered a lot of ground!

In this Breaking Analysis, as a warmup for our 2022 predictions post, we’ll review each of our predictions for this past year and grade the accuracy of our forecasts

Watch the full video analysis.

Episode 111 - Why Oracle’s Stock is Surging to an All time High  - On Friday, Oracle announced a meaningful earnings beat and strong forward guidance on the strength of its license business; and slightly better than expected cloud performance. The stock rose sharply on the day and closed up nearly 16% surpassing $280B in market value. Oracle’s success is due largely to its execution of a highly differentiated strategy that has evolved over the past decade or more; deeply integrating its hardware and software, heavily investing in next generation cloud, creating a homogenous experience across its application portfolio and becoming the number one platform for the world’s most mission critical applications. While investors piled into the stock, skeptics will point to the beat being tilted toward license revenue and investors will likely keep one finger on the sell button until they’re convinced Oracle’s cloud momentum is more consistent and predictable.

In this Breaking Analysis we’ll review Oracle’s most recent quarter and pull in some ETR survey data to frame the company’s cloud business, the momentum of Fusion ERP, where the company is winning and some gaps/opportunities we see that can be addressed in the coming quarters.

Watch the full video analysis.
**Episode 110 - Rise of the Supercloud**  - Last week’s AWS re:Invent underscored the degree to which cloud computing generally and AWS specifically have impacted the technology landscape. From making infrastructure deployment simpler, to accelerating the pace of innovation, to the formation of the world’s most active and vibrant technology ecosystem; it’s clear that AWS has been the number one force for industry change in the last decade. Going forward we see three high level contributors from AWS that will drive the next 10 years of innovation, including: 1) the degree to which data will play a defining role in determining winners and losers; 2) the knowledge assimilation effect of AWS’ cultural processes such as two pizza teams, customer obsession and working backwards; and 3) the rise of superclouds—that is clouds built on top of hyperscale infrastructure that focus not only on IT transformation, but deeper business integration and digital transformation of entire industries.

In this Breaking Analysis we’ll review some of the takeaways from the 10th annual AWS re:Invent conference and focus on how we see the rise of superclouds impacting the future of virtually all industries.

Watch the full video analysis.

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**Episode 109 - Break up Amazon? Survey Suggests it May Not be Necessary**  - Despite the posture that big tech generally and Amazon.com Inc. specifically should be regulated and/or broken apart, recent survey research suggests that Amazon faces many disruption challenges, independent of any government intervention. Specifically, respondents to our survey believe that history will repeat itself in that there’s a 60% probability that Amazon will be disrupted by market forces, including self-inflicted wounds. Amazon faces at least seven significant disruption scenarios of varying likelihood and impact, perhaps leading to the conclusion that the government should let the market adjudicate Amazon’s ultimate destiny.

In this Breaking Analysis, and ahead of AWS re:Invent, we share the results of our survey designed to assess what, if anything, could disrupt Amazon. We’ll also show you some data from ETR that indicates the strong momentum of AWS is likely to continue, which could be a factor in any government intervention.

Watch the full video analysis.

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**Episode 108 - AWS & Azure Accelerate Cloud Momentum**  - Despite all the talk about repatriation, hybrid and multi-cloud opportunities and cloud as an increasingly expensive option for customers...the data continues to show the importance of public cloud to the digital economy. Moreover, the two leaders, AWS and Azure are showing signs of accelerated momentum that point to those two giants pulling away from the pack in the years ahead. Each of these companies is demonstrating broad-based momentum across their respective product lines. It’s unclear if anything other than government intervention or self-inflicted wounds will slow these two companies down this decade. Despite the commanding lead of the two leaders, a winning strategy for companies that don’t run their own cloud continues to be innovating on top of their massive CAPEX investments. The most notable example of this approach in our view continues to be Snowflake.

In this Breaking Analysis, Dave will provide our quarterly market share update of the big four hyperscale cloud providers. We’ll share some new data from ETR based on the most recent survey, drill into some of the reasons for the momentum of AWS and Azure; and drill further into the database and data warehouse
 sector to see what if anything has changed in that space.

Watch the full video analysis.

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**Episode 107 - Cutting Through the Noise of Full Stack Observability** – Full stack observability is the new buzz phrase. As businesses go digital, customer experience becomes ever more important. Why? Because fickle consumers can switch brands in the blink of an eye – or the click of a mouse. Every vendor wants a piece of the action in this market including companies that have provided traditional monitoring, log analytics, application performance management, and related services. These companies are joined by a slew of new entrants claiming end-to-end visibility across the so-called “modern tech stack.” Recent survey research however confirms our thesis that no one company has it all. New entrants have a vision and are not encumbered by legacy technical debt. However their offerings are immature. Established players with deep feature sets in one segment are pivoting through M&A and organic development to fill gaps. Meanwhile, cloud players are gaining traction and participating through a combination of native tooling combined with strong ecosystems to address this opportunity.

In this Breaking Analysis we dive into a recent ETR drill down study on full stack observability. And to do so we once again welcome in our colleague Erik Bradley, Chief Engagement Strategist at ETR.

Watch the full video analysis.

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**Episode 106 - What Could Disrupt Amazon?** – Five publicly traded, US-based companies have market valuations over or just near one trillion dollars. As of Oct. 29th, Apple and Microsoft top the list, each at $2.5T, followed by Alphabet at $2T, Amazon at $1.7T and Facebook (now Meta) at just under $1T – off from its high of $1.1T prior to its recent troubles. These companies have reached extraordinary levels of success and power. What, if anything could disrupt their market dominance?

In his book Seeing Digital, Author David Moschella made three key points that are relevant:

In the technology industry, disruptions are the norm - The waves of mainframes, Minis, PCs, Mobile and the Internet all saw new companies emerge and power structures that dwarfed previous eras of innovation. Is that dynamic changing?

Every industry has a disruption scenario.

Silicon Valley - broadly defined to include Seattle, or at least Amazon - has a dual disruption agenda. The first being horizontally targeting the technology industry and the second as digital disruptors in virtually any industry. How relevant is that to the future power structure of the technology business?

In this Breaking Analysis we welcome in author, speaker, researcher, thought leader and senior fellow at ITIF, David Moschella to assess what could possibly disrupt today’s trillionaire companies. And we’ll start with Amazon.

Watch the full video analysis.

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**Episode 105 - Data Mesh...A New Paradigm for Data Management** – Data mesh is a new way of thinking about how to use data to create organizational value. Leading edge practitioners are
beginning to implement data mesh in earnest. Importantly, data mesh is not a single tool or a rigid reference architecture. Rather it’s an architectural and organizational model that is designed to address the shortcomings of decades of data challenges and failures. As importantly, it’s a new way to think about how to leverage and share data at scale across an organization and ecosystems. Data mesh in our view will become the defining paradigm for the next generation of data excellence.

In this Breaking Analysis we welcome the founder and creator of data mesh, author, thought leader, technologist Zhamak Dehghani, who will help us better understand some of core principles of data mesh and the future of decentralized data management. With practical advice for data pros who want to create the next generation of data-driven organizations.

Watch the full video analysis.

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**Episode 104 – The Hybrid Cloud Tug of War Gets Real**  
It looks like Hybrid cloud is finally here. We’ve seen a decade of posturing, marketecture, slideware and narrow examples but there’s little question that the definition of cloud is expanding to include on-premises workloads in hybrid models. Depending on which numbers you choose to represent IT spending, public cloud accounts for less than 5% of the total pie. As such there’s a huge opportunity in hybrid, outside of the pure public cloud; and everyone wants a piece of the action.

The big question is how will this now evolve? Customers want control, governance, security, flexibility and a feature-rich set of services to build their digital businesses. It’s unlikely they can buy all that – so they’re going to have to build it with partners. Specifically vendors, SIs, consultancies, and their own developers. The tug-of-war to win the new cloud day has finally started in earnest – between the hyperscalers and the largest enterprise tech companies in the world.

Watch the full video analysis.

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**Episode 103 – The Future of the Semiconductor Industry**  
Semiconductors are at the heart of technology innovation. For decades, technology improvements have marched to the cadence of silicon advancements in performance, cost, power and packaging. In the past ten years, the dynamics of the semiconductor industry have changed dramatically. Soaring factory costs, device volume explosions, fabless chip companies, greater programmability, compressed time to tape out, more software content, the looming Chinese presence...these and other factors have permanently changed the power structure of the semiconductor business.

We rely on chips for every aspect of our lives, which has led to a global semiconductor shortage that has impacted more industries than we’ve ever seen. Our premise is that silicon success in the next twenty years will be determined by volume manufacturing expertise, design innovation, public policy, geopolitical dynamics, visionary leadership and innovative business models that can survive the intense competition in one of the most challenging businesses in the world.

Watch the full video analysis.

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**Episode 102 – UiPath Fast Forward to Enterprise Automation | UiPath FORWARD IV**  
UiPath has always been an unconventional company. It started with humble beginnings as essentially a
software development shop. It then caught lightning in a bottle with its computer vision technology and simplification mantra...creating easy to deploy software robots for bespoke departments to automate mundane tasks. The story is well known...the company grew rapidly and was able to go public earlier this year. Consistent with its out of the ordinary approach, while other firms are shutting down travel and physical events, UiPath is moving ahead with Forward IV, its annual user conference next week...with a live audience at the Bellagio in Las Vegas. It's also “Fast Forwarding” as a company, determined to lead the charge beyond RPA point tools and execute on a more all-encompassing enterprise automation agenda.

Watch the full video analysis.

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**Episode 101 - CIOs Signal Hybrid Work Will Power Spending Through 2022** - Throughout the pre-vaccine COVID era, IT buyers indicated budget constraints would squeeze 2020 spending by roughly 5% relative to 2019 levels. But the forced March to digital combined with increased cyber threats for remote workers, created a modernization mandate that powered Q4 spending last year. This momentum has carried through to 2021. While COVID variants have delayed return to work and business travel plans, our current forecast for global IT spending remains strong at 6-7%, slightly down from previous estimates. But the real story is CIOs and IT buyers expect a 7-8% increase in 2022 spending, reflecting investments in hybrid work strategies and a continued belief that technology remains the underpinning of competitive advantage in the coming decade.

In this Breaking Analysis, Dave will share the latest results of ETR’s macro spending survey and update you on industry and sector investment patterns.

Watch the full video analysis.

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**Episode 100 - How Cisco can win cloud’s ‘Game of Thrones’** - Cisco is a company at the crossroads. It is transitioning from a high margin hardware business to a software subscription-based model through both organic moves and targeted acquisitions. It’s doing so in the context of massive macro shifts to digital and the cloud. We believe Cisco’s dominant position in networking, combined with a large market opportunity and a strong track record of earning customer trust, put the company in a good position to capitalize on cloud momentum. But there are clear challenges ahead, not the least of which is the growing complexity of Cisco’s portfolio, transitioning a large legacy business and the mandate to maintain its higher profitability profile as it moves to a new business model.

In this Breaking Analysis, we welcome in Zeus Kerravala, Founder and Principal Analyst at ZK Research and long time Cisco watcher who collaborated with us to craft the premise of this session.

Watch the full video analysis.

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**Episode 99 - The Case for Buy the Dip on Coupa, Snowflake & Zscaler** - Buy the dip has been an effective strategy since the market bottomed in early March last year. The approach has been especially successful in tech and even more so for those tech names that: 1) were well-positioned for the forced march to digital – i.e. remote work, online commerce, data-centric platforms and certain cybersecurity plays; and 2) already had the cloud figured out. The
question on investors’ minds is where to go from here. Should you avoid some of the high flyers that are richly valued with eye-popping multiples? Or should you continue to buy the dip? And if so, which companies that capitalized on the trends from last year will see permanent shifts in spending patterns that make them a solid long term play.

In this Breaking Analysis we shine the spotlight on three companies that may be candidates for a buy the dip strategy over the next 3-5 years. To do so it’s our pleasure to welcome Ivana Delevska, the Chief Investment Officer and founder of SPEAR Alpha, a new, research-centric ETF focused on industrial technology.

Watch the full video analysis.

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**Episode 98 - Thinking Outside the Box...AWS Signals a New Era for Storage** – By our estimates, AWS will generate around $9B in storage revenue this year and is now the second largest supplier of enterprise storage behind Dell. We believe AWS storage revenue will surpass $11B in 2022 and continue to outpace on-prem storage growth by more than 1,000 basis points for the next three to four years. At its third annual Storage Day event, AWS signaled a continued drive to think differently about data storage and transform the way customers migrate, manage and add value to their data over the next decade.

In this Breaking Analysis Dave will give a brief overview of what we learned at AWS’ Storage Day, share our assessment of the big announcement of the day – a deal with NetApp to run the full ONTAP stack natively in the cloud as a managed service – and share some new data on how we see the market evolving.

Watch the full video analysis.

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**Episode 97 - Tech Earnings Signal a Continued Booming Market** – Tech earnings reports from key enterprise software and infrastructure players this week, underscore that IT spending remains robust in the post isolation economy. This is especially true for those companies that have figured out a coherent and compelling cloud strategy. Despite COVID variant uncertainties and hardware component shortages, most leading tech names outperformed expectations. That said, investors weren’t in the mood to reward all stocks and any variability in product mix, earnings outlook or bookings/billings nuances were met with a tepid response from the street.

In this Breaking Analysis Dave will provide our commentary and new data points on key technology companies including Snowflake, Salesforce, Workday, Splunk, Elastic, Palo Alto Networks, VMware, Dell, Pure Storage, HP Inc. and NetApp.

Watch the full video analysis.

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**Episode 96 - Can anyone tame the identity access beast? Okta aims to try...** – Chief information security officers cite trust as the most important value attribute they can deliver to their organizations. And when it comes to security, identity is the new attack surface. As such, identity and access management continue to be the top priority among technology decision makers. It also happens to be one of the most challenging and complicated areas of the cyber security landscape. Okta, a leader in the identity space, has announced its intent to converge
privilege access and identity governance in an effort to simplify the landscape and reimagine identity. Our research shows that interest in this type of consolidation is high, but organizations believe technical debt, compatibility issues, expense and lack of talent are barriers to reaching cyber nirvana with their evolving zero trust networks.

In this Breaking Analysis, Dave will explore the complex and evolving world of identity access and privileged account management. With an assessment of Okta’s market expansion aspirations and fresh data from ETR and input from Erik Bradley.

Watch the full video analysis.

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**Episode 95 - Rethinking Data Protection in the 2020s** - Techniques to protect sensitive data have evolved over thousands of years, literally. The pace of modern data protection is rapidly accelerating and presents both opportunities and threats for organizations. In particular, the amount of data stored in the cloud, combined with hybrid work models, the clear and present threat of cyber crime, regulatory edicts and ever-expanding edge use cases should put CxOs on notice that the time is now to rethink your data protection strategies.

In this Breaking Analysis, Dave is going to explore the evolving world of data protection and share some data on how we see the market evolving and the competitive landscape for some of the top players.

Watch the full video analysis.

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**Episode 94 - Cyber, Cloud, Hybrid Work & Data Drive 8% IT Spending Growth in 2021** - Every CEO is figuring out the right balance for new hybrid business models. Regardless of the chosen approach, which will vary, technology executives understand they must accelerate digital and build resilience as well as optionality into their platforms. This is driving a dramatic shift in IT investments at the macro level as we expect total spending to increase at 8% in 2021, compared to last year’s contraction. Investments in cyber security, cloud, collaboration to enable hybrid work and data, including analytics, AI and automation are the top spending priorities for CxOs.

In this Breaking Analysis Dave welcomes back Erik Bradley, Chief Engagement Strategist at our partner ETR. In this post we’ll share some takeaways from ETR’s latest survey and provide our commentary on what it means for markets, sellers and buyers. We’ll also explain what we think Wall Street is missing about Amazon’s latest earnings.

Watch the full video analysis.

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**Episode 93 - ServiceNow’s Collision Course with Salesforce.com** - ServiceNow is a company that investors love to love. But there’s caution in the investor community right now as confusion about transitory inflation and higher interest rates looms. ServiceNow also suffers from perfection syndrome and elevated expectations. In this Breaking Analysis Dave will dig into ServiceNow, one of the companies we began following almost ten years ago, and provide some thoughts on ServiceNow’s march to $15B by 2026.

Watch the full video analysis.
Episode 92 - **Survey Data Shows no Slowdown in AWS & Cloud Momentum** - Despite all the chatter about cloud repatriation and the exorbitant cost of cloud computing, customer spending momentum continues to accelerate in the post isolation economy. If the pandemic was good for the cloud it seems that the benefits of cloud migration remain lasting in the late stages of COVID. And we believe this stickiness will continue. In this Breaking Analysis Dave will share some fresh July survey data that indicates accelerating momentum for the largest cloud computing firms.

Watch the full video analysis.

Episode 91 - **How JPMC is Implementing a Data Mesh Architecture on the AWS Cloud** - A new era of data is upon us. The technology industry generally and the data business specifically are in a state of transition. Even our language reflects that. For example, we rarely use the phrase “Big Data” anymore. Rather we talk about digital transformation or data-driven companies. In this Breaking Analysis we want to share our assessment of the state of the data business. We’ll do so by looking at the data mesh concept and how a division of a leading financial institution, JPMC, is practically applying these relatively new ideas to transform its data architecture for the next decade.

Watch the full video analysis.

Episode 90 - **Mobile World Congress Highlights Telco Transformation** - A Mobile World Congress is on for 2021. theCUBE will be there and we’ll let you know if it’s alive and well. As we approach a delayed MWC it’s appropriate to reflect on the state of the telecoms industry. Let’s face it – the telcos have done a great job of keeping us all connected during the pandemic. In this Breaking Analysis we welcome a long time telecoms industry analyst and the Founding Director of Lewis Insight, Mr. Chris Lewis.

Watch the full video analysis.

Episode 89 - **How AWS is Revolutionizing Systems Architecture** - AWS is pointing the way to a revolution in system architecture. Much in the same way that AWS defined the cloud operating model last decade, we believe it is once again leading in future systems. In this Breaking Analysis we’ll dig into the moves that AWS has been making, explain how they got here, why we think this is transformational for the industry and what this means for customers, partners and AWS’ many competitors.

Watch the full video analysis.

Episode 88 - **Learnings from the hottest startups in cyber & IT infrastructure** - As you well know by now, the cloud is about shifting IT labor to more strategic initiatives. Or as Andy Jassy posited at the first AWS re:Invent conference in 2012, removing the undifferentiated heavy
lifting associated with deploying and managing IT infrastructure. In this Breaking Analysis Dave is pleased to welcome a special guest, Erik Suppiger, author of the Elite 80 – a report that details the hottest privately held cybersecurity and IT infrastructure companies in the world. Erik is a senior analyst at JMP Securities and will share insights from this report.

Watch the full video analysis.

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**Episode 87 - Chasing Snowflake in Database Boomtown**  – Database is the heart of enterprise computing. The market is both growing rapidly and evolving. Major forces transforming the space include cloud and data – of course – but also new workloads, advanced memory and IO capabilities, new processor types, a massive push toward simplicity, new data sharing and governance models; and a spate of venture investment. In this Breaking Analysis Dave will share our most current thinking on the database marketplace and dig into Snowflake’s execution, some of its challenges and we’ll take a look at how others are making moves to solve customer challenges; and angling to get their piece of the growing database pie.

Watch the full video analysis.

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**Episode 86 - How Nvidia plans to own the data center with AI**  – Nvidia wants to completely transform enterprise computing by making datacenters run 10X faster at 1/10th the cost. In this Breaking Analysis Dave will explain why we believe Nvidia is in a strong position to power the world’s computing centers and how it plans to disrupt the grip that x86 architectures have had on the datacenter market for decades.

Watch the full video analysis.

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**Episode 85 - Your Online Assets Aren’t Safe – Is Cloud the Problem or the Solution?**  – The convenience of online access to bank accounts, payment apps, crypto exchanges and other transaction systems has created enormous risks, which the vast majority of individuals either choose to ignore or simply don’t understand. In this Breaking Analysis Dave will try to raise awareness about a growing threat to your liquid assets and hopefully inspire you to do some research and take actions to lower the probability of you losing thousands, hundreds of thousands or millions of dollars.

Watch the full video analysis.

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**Episode 84 - Debunking the Cloud Repatriation Myth**  – Cloud repatriation is a term often used by technology companies that don’t operate a public cloud. The marketing narrative most typically implies that customers have moved work to the public cloud and, for a variety of reasons – expense, performance, security, etc. Some have written about the repatriation myth, but in this Breaking Analysis, Dave will share hard data from ETR and other sources that we feel debunks the repatriation narrative as it’s currently being promoted.

Watch the full video analysis.
**Episode 83 - Chaos Creates Cash for Criminals & Cyber Companies** - The pandemic not only accelerated a shift to digital, it highlighted a rush of cyber criminal sophistication, collaboration and chaotic responses from virtually every major company on the planet. The SolarWinds hack exposed digital supply chain weaknesses and appears to have accelerated so-called island hopping techniques that are exceedingly difficult to detect. In this Breaking Analysis Dave will provide our quarterly update on the security industry and share new survey data from ETR and theCUBE community that will help you navigate through the maze of corporate cyber warfare.

Watch the full video analysis.

**Episode 81 - A Digital Skills Gap Signals Rebound in IT Services Spend** - Recent survey data from ETR shows that enterprise tech spending is tracking with projected U.S. GDP growth at 6% to 7% this year. Many markers continue to point the way to a strong recovery including hiring trends and the loosening of frozen IT project budgets. In this Breaking Analysis Dave welcomes back Erik Bradley, Chief Engagement Strategist at ETR, who will share fresh data, perspectives and insights from the latest survey data.

Watch the full video analysis.