



雲端賦能智慧製造：轉型實戰

Michael Lin

Sr. Solutions Architect
Amazon Web Services

Agenda

- Digital Innovation and Cloud Computing
- Grow Demand with AWS IoT Services
- Generative AI with SAP
- Technician Assistant from KONE
- Modernize Legacy Apps
- Next Step

Digital Innovation and Cloud Computing



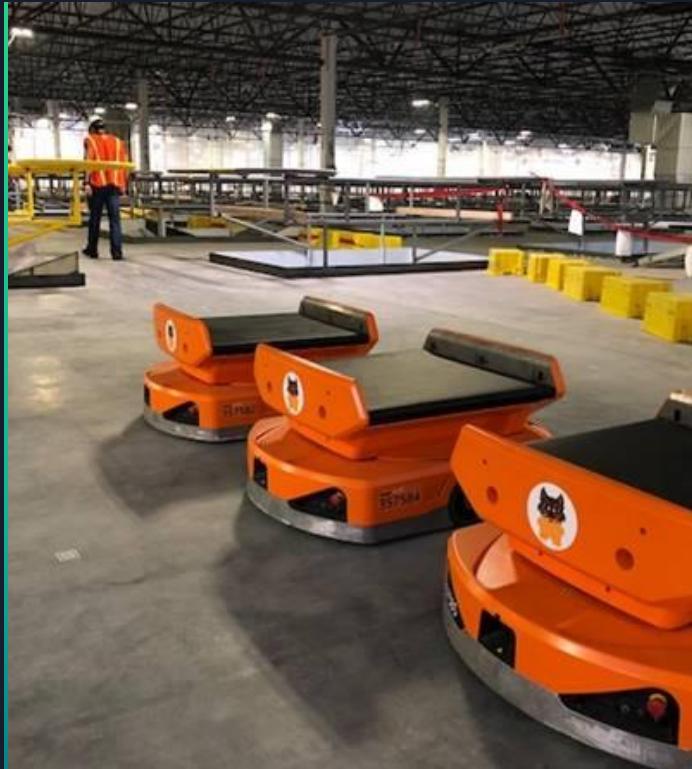
Cloud Unlocks \$3 Trillion in Business Value Driven by Innovation Beyond Cost Savings

- McKinsey projects \$3 trillion in EBITDA potential by 2030 across Fortune 2000 companies
- Innovation value from cloud exceeds IT cost savings by 5x
- Organizations can achieve 20-30% EBITDA uplift across sectors
- Cloud democratizes enterprise capabilities, shifting advantage from scale to skill

<https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/from-legacy-to-cloud-lessons-from-the-trenches>;
<https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/in-search-of-cloud-value-can-generative-ai-transform-cloud-roi>;
<https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/projecting-the-global-value-of-cloud-3-trillion-is-up-for-grabs-for-companies-that-go-beyond-adoption>;
<https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-cloud-computing>



Innovations Driving Growth at Scale for Amazon



520K+ robotic drive units support 300 facilities



775K hours saved for drivers and carriers during check in & out



World's 1st store with Just Walk Out technology for fast, frictionless shopping

The Vivotek Vortex



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Vortex Service Launch: 12 Months Early

[Customer Stories](#) / Hi Tech, Electronics & Semiconductor / Taiwan

2024



VIVOTEK Accelerates Launch of VORTEX, Its Cloud Surveillance Platform, by 12 Months with AWS IoT Core

VIVOTEK launches its next-generation video-surveillance-as-a-service (VSaaS) solution, VORTEX, on AWS IoT Core—saving time and R&D resources to focus on innovation and scalability.

“More than **80 percent** of our resources can go towards driving **innovation** because managing our infrastructure on AWS is so simple.”

ShengFu Cheng
Vice President of the Strategy Business Division at VIVOTEK

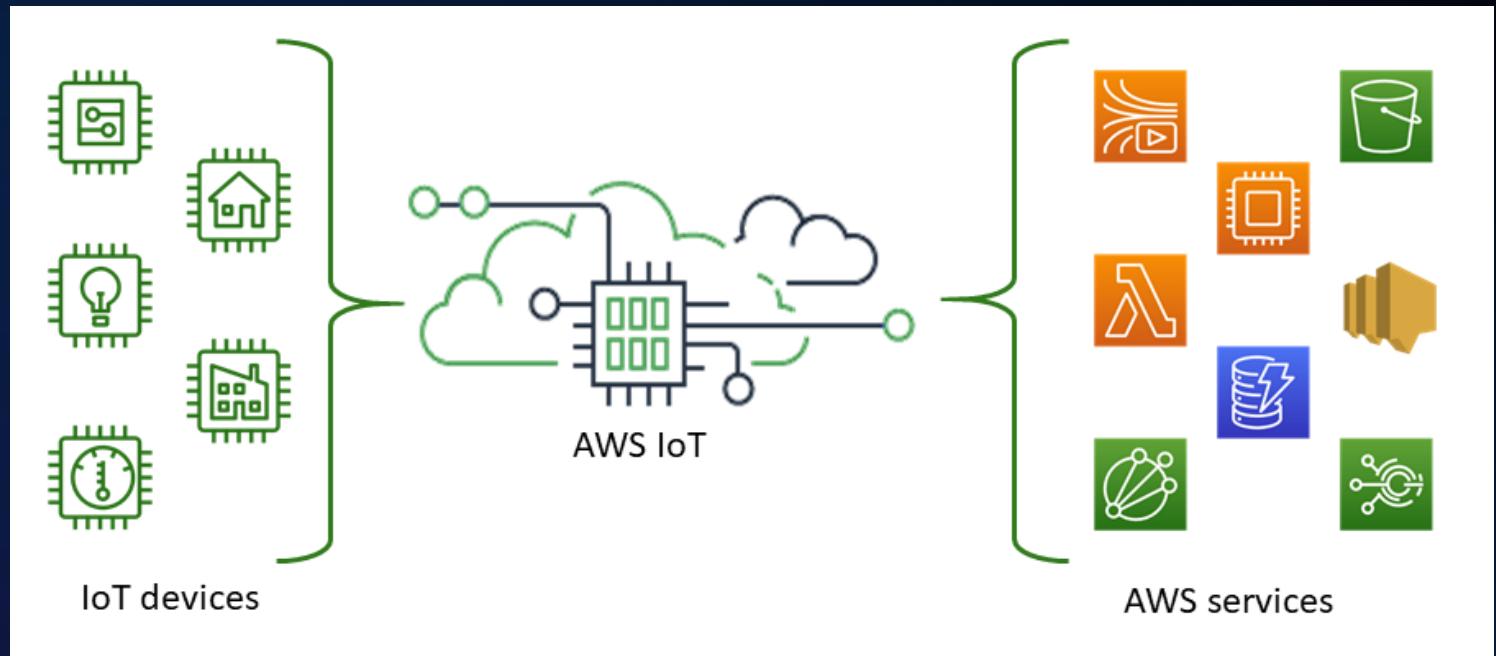


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<https://aws.amazon.com/solutions/case-studies/vivotek-case-study/>

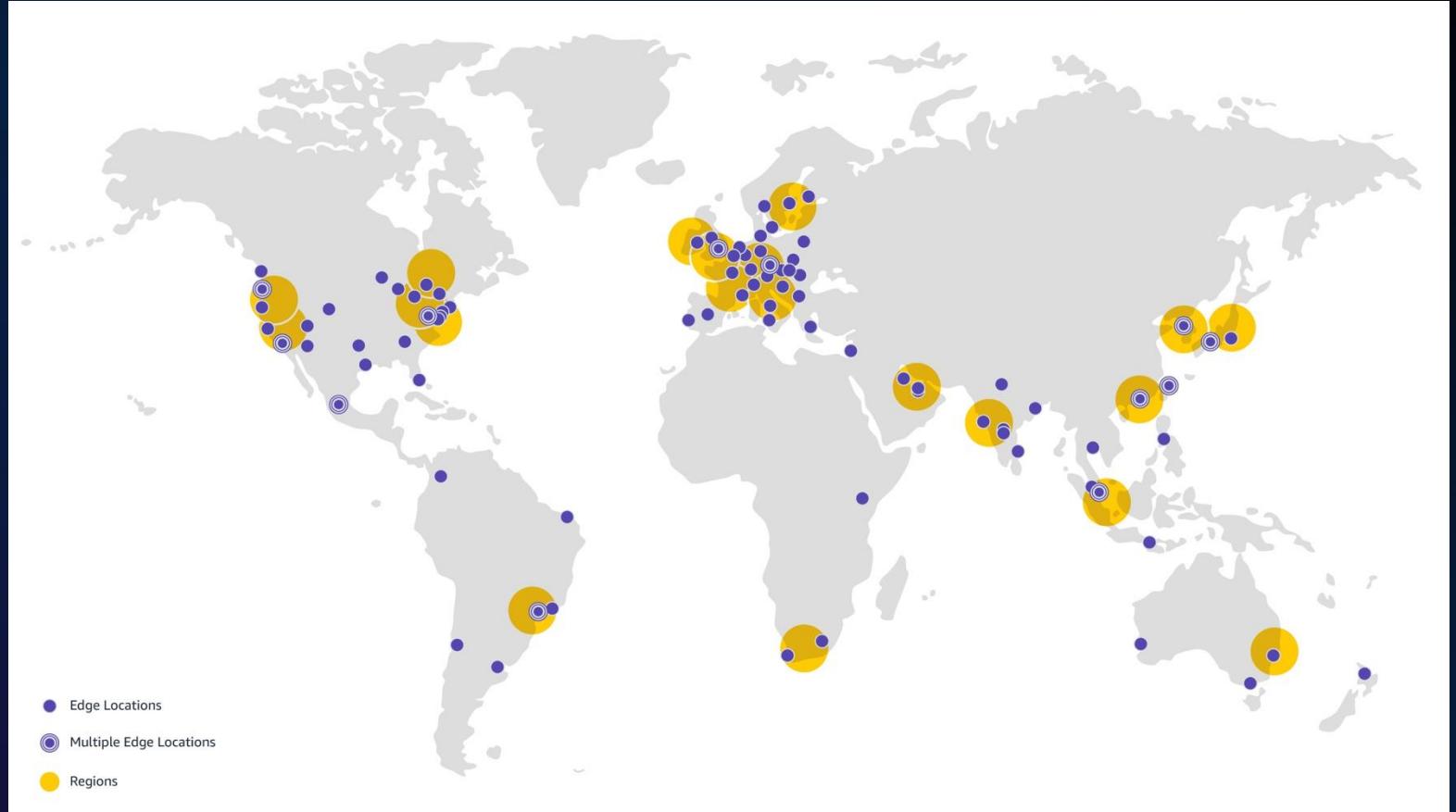
Connecting Billions of IoT Devices with AWS IoT Core

- Device Provision
 - Registration
- MQTT
 - WebRTC signaling
 - Publish event
- IoT Shadow
 - Configuration



Video Footage Backed up in Amazon S3

- *Data Privacy*
 - Regulation
 - GDPR
- *Different regions*
 - USA
 - JP
 - ANZ
 - Germany



AWS Services as Building Blocks



Reliability

系統最重要核心影像串流由晶睿通訊透過 EC2 自行開發維護，搭配 S3 存放重要影像資料 (Image/Video)，相關資料則透過 AWS 既有服務進行加密動作

Serverless

透過 Cognito 與 IoT Core 管理用戶與設備，再由 EKS 管理整個後端服務，相關資料存放於 DynamoDB 與 RDS，AI 智能辨識於攝影機端辨識後再透過 SNS 服務推撥給客戶，整體架構採用無服務氣運算架構減少營運能量，省下維運量能解省成本

AI

結合 RDS 與 OpenSearch 服務達到快速響應，直接存放詮釋資料 (Metadata) 讓客戶於搜尋查找關鍵影像就算選擇多樣性的特徵及條件也可快速得到結果，甚至於數以百計攝影機中也可立即提供搜尋結果

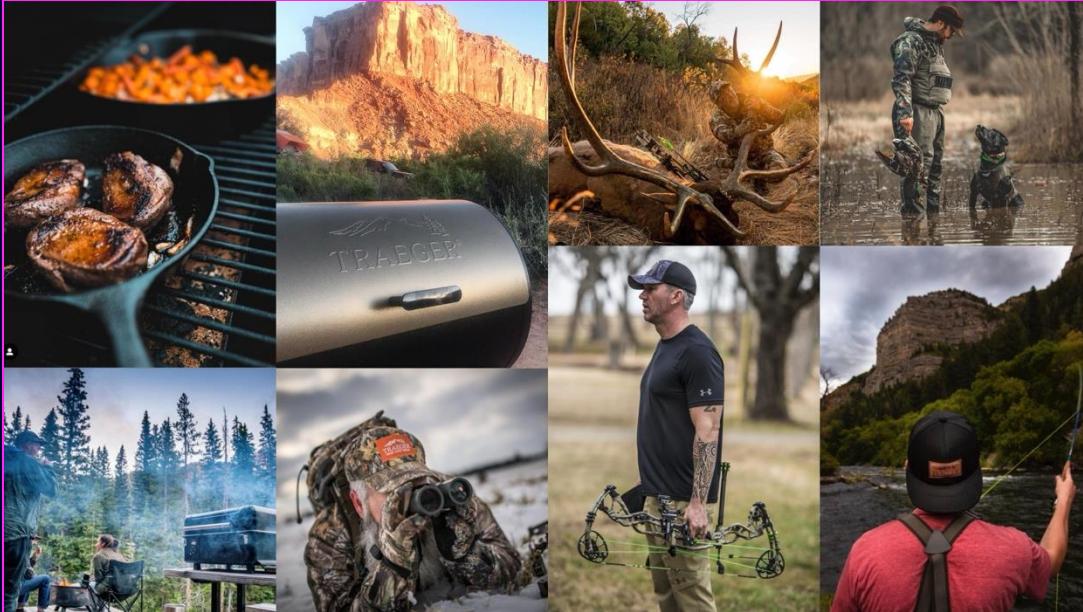
Security

採用 WAF 與 GuardDuty 保護和監控系統。再使用 Secrets Manager 來儲存一些關鍵設定、金鑰和訊息

Grow demand with AWS IoT services







1987

1991
Hot rod developed

2017
First IoT grill

2020
IoT platform **retired**

2016
Cooking algorithms developed

2019
IoT platform **acquired**

IoT migration to AWS



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Traeger's AWS IoT architecture at launch



Migration metrics

- Code complete in three months
- **111,000** active devices migrated
- **700,000** user accounts migrated
- **150** TB of data moved
- No downtime

“

Once re-platformed on AWS, Traeger was able to double the number of IoT-connected grills to **300K** in just **18 months** and can now scale to **accommodate millions more**.

Traeger Tech Team

AWS Partner Success Whitepaper – **2020**



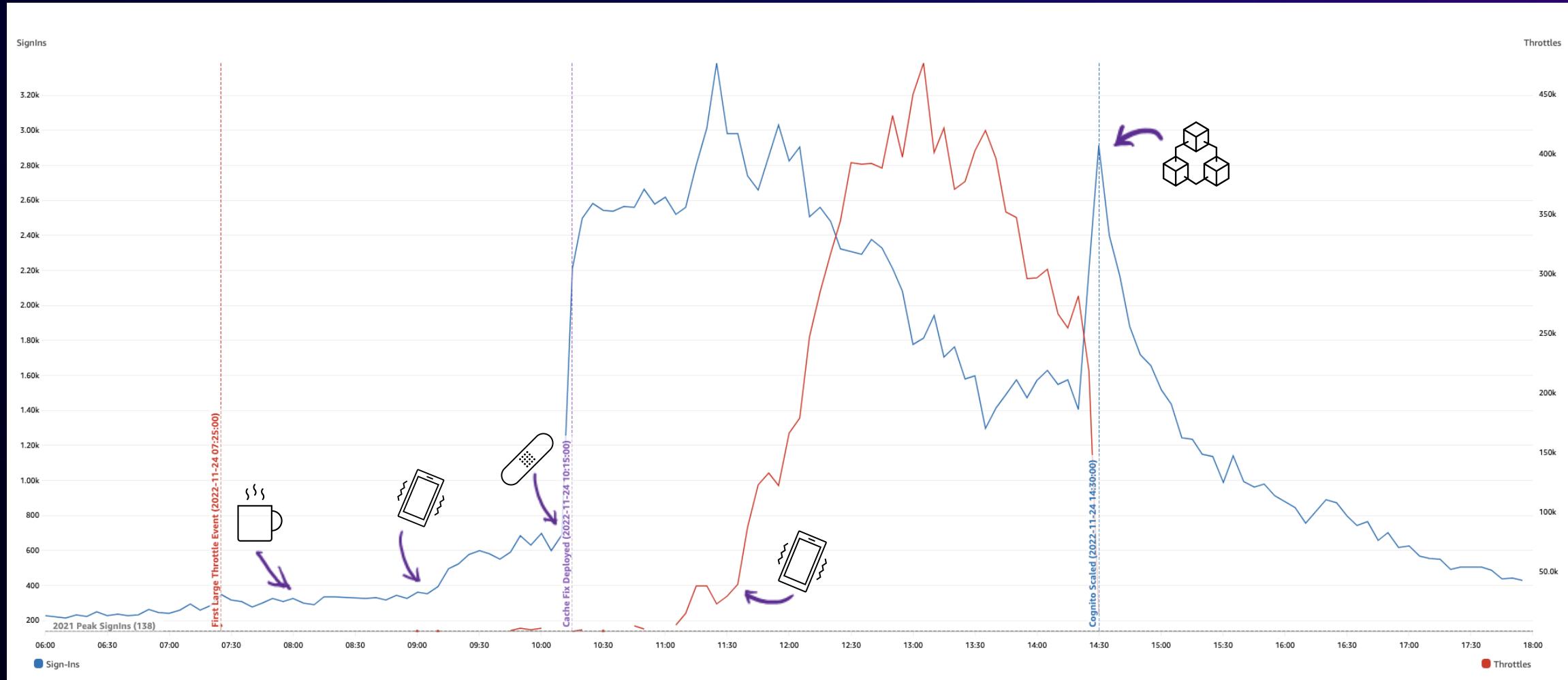
Thanksgiving 2022



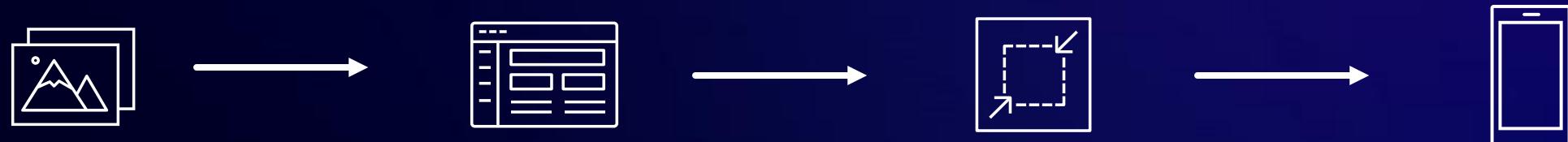
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A less-than-perfect Thanksgiving

SYSTEM FAILURES CASCADED DUE TO TIGHT COUPLING OF SERVICES



What went wrong?



CMS began rate
limiting

Recipes stopped
rendering

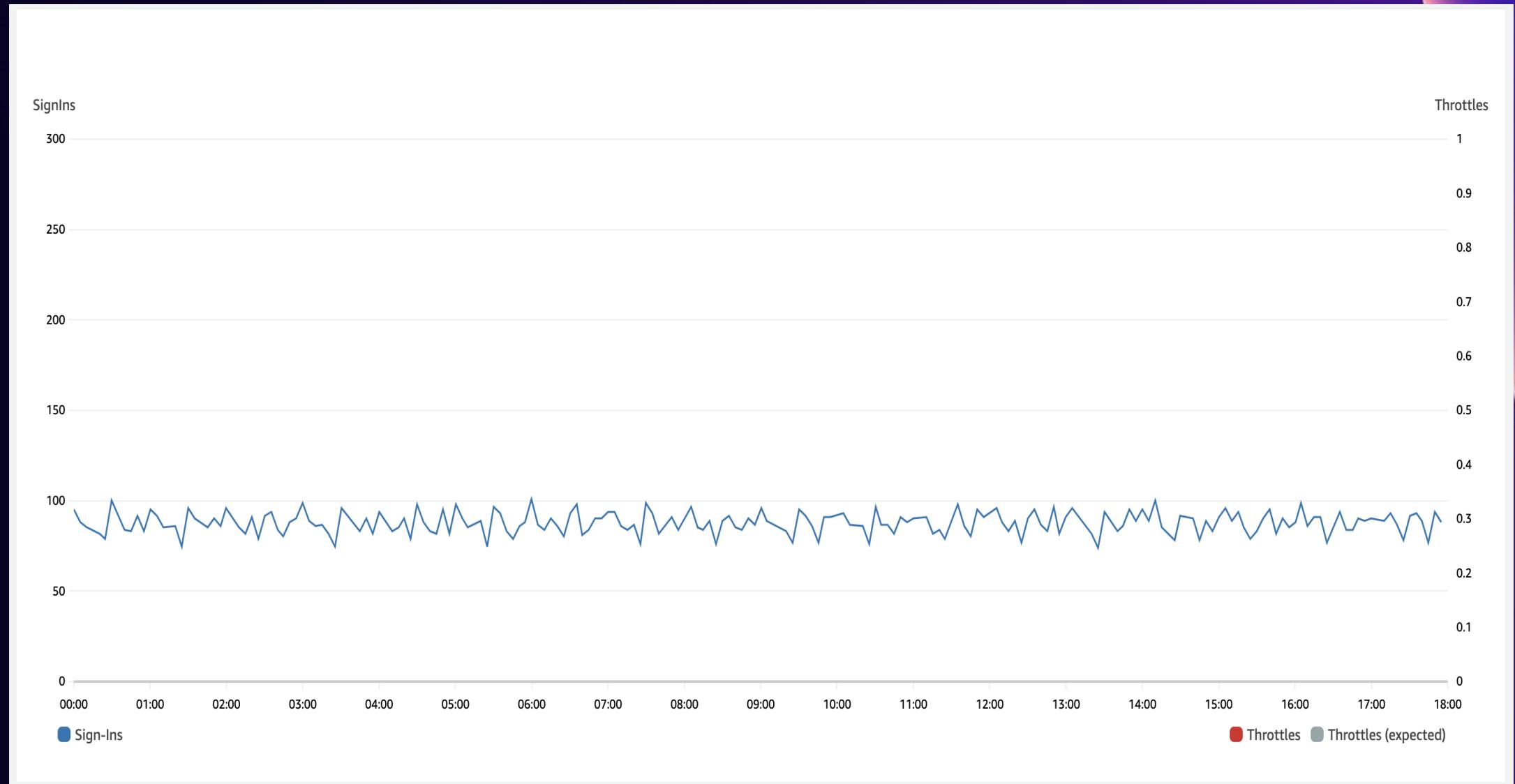
Emergency cache
deployed

Amazon Cognito
hugged to death by
mobile apps

Evolving architecture for scale



Thanksgiving 2023



Generative AI with SAP



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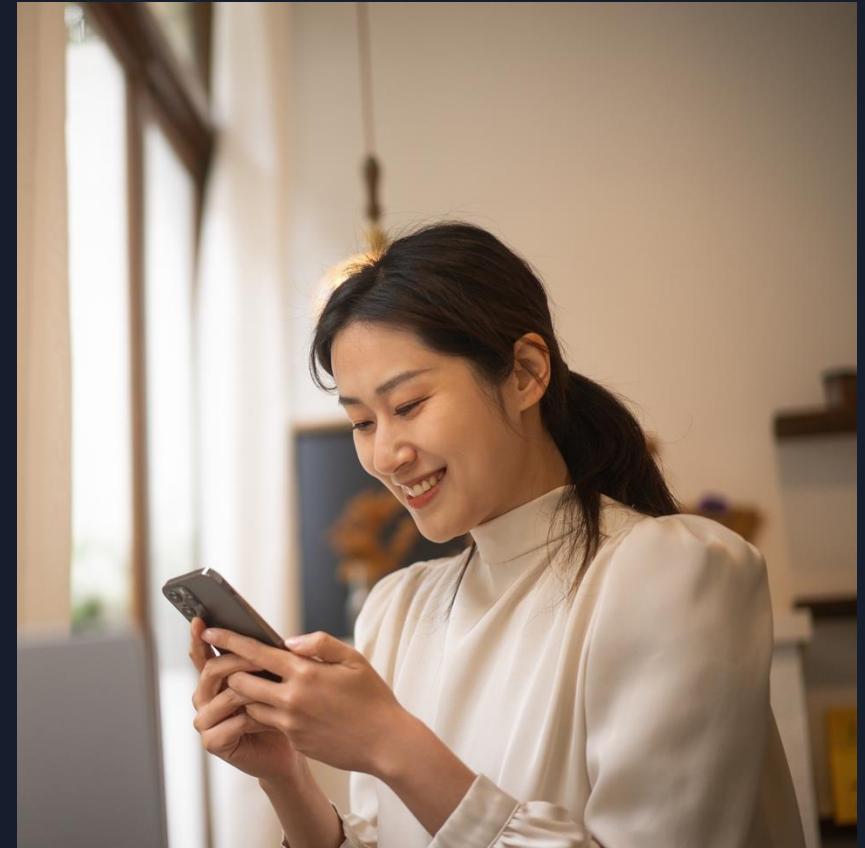
Executive SAP insights and E-mail Generation

Key Challenges

- E-mail notification, alerts, and reports consume resources to manually review, analyze and summarize
- Lack of agility in responding to business problems

Benefits of Generative AI

- Create insights from SAP reports, reducing time writing commentary and interpreting SAP information
- Generate actionable insights with generative AI
- Share summarized content and E-mail messages with leadership



Amazon SES



Amazon SDK



Amazon Bedrock

Example: Finance Report and Insights

From SAP data

To actionable insights

Company Code 1010		G/L Account Balances										Time 21:23:03		Date 11/09/2023	
Walldorf		Ledger OL										RFBSLDD01			
Carryforward Periods 00-05 2023 Reporting Periods 01-16 2023															
Code & Description	Period	Curcy	Bush	Balance	Carryforward	Balance of Prior Periods	Debit	Since of Reporting Period	Credit	Balance	Reporting Per.				
1010 121000000 Revolute Domestic	EUR		0.00			626.55				626.55					626.55
1010 126000000 Inventory TradingdG	EUR		0.00			5,971.28				5,941.46					128.82
1010 211000000 GR/GR	EUR		0.00			340.50				340.50					0.00
1010 212000000 Payable Affiliate	EUR		0.00			0.00				4,212.00					4,212.00
1010 212000000 Current Tax (WHS)	EUR		0.00			0.00				1,000.00					1,000.00
1010 255001000 Tax Balance Clrg	EUR		0.00			4,082.18				4,082.18					4,082.18
1010 410000000 Rev Domestic Prod	EUR		0.00			0.00				0.00					0.00
1010 516000000 Conspen Trade Gds	EUR		0.00			2,920.79				0.00					2,920.79
1010 520410000 Loss Pro Var PRD	EUR		0.00			1,161.45				0.00					1,161.45
1010 520410000 Loss Pro Var PRD	EUR		0.00			15,102.69				15,102.69					15,102.69
Company Code 1710															
Falz Also	Ledger OL														
Carryforward Periods 00-05 2023 Reporting Periods 01-16 2023		G/L Account Balances										Time 21:23:03		Date 11/09/2023	
Code & Description	Period	Curcy	Bush	Balance	Carryforward	Balance of Prior Periods	Debit	Since of Reporting Period	Credit	Balance	Reporting Per.				
1710 010100000 Petty Cash	USD		93,221.69			0.00				0.00					93,221.69
1710 100200000 Petty Cash Journal	USD		730.00			0.00				0.00					730.00
1710 100900000 Rev. Cash Collateal USD	USD		201,666.00			0.00				0.00					201,666.00
1710 110001000 Main Bank Accts (C/B) USD	USD		15,221.00			0.00				0.00					15,221.00
1710 110001018 Main Bank Accts Payment USD	USD		760.00			0.00				0.00					760.00
1710 110001020 Bank Cash Transfer	USD		152,401,198.61			0.00				0.00					152,401,198.61
1710 110001020 Bank Cash Transfer	USD		110.00			0.00				0.00					110.00
1710 110001050 Bank Check Out	USD		4,520,128.45			0.00				0.00					4,520,128.45
1710 110001050 Bank Check Out	USD		15,221.00			0.00				0.00					15,221.00
1710 110001050 Bank Check Receipt	USD		203,221,645.26			0.00				0.00					203,221,645.26
1710 110001090 Bank Techn. Account	USD		2,570.00			0.00				0.00					2,570.00
1710 110011000 Bank Foreign Currency	USD		25,066.67			0.00				0.00					25,066.67
1710 110012000 Bank Lockbox	USD		333.40			0.00				0.00					333.40
1710 110012000 Bank Lockbox	USD		5,470,000.00			0.00				0.00					5,470,000.00
1710 110002020 Bank Main Transfers	USD		290,766,754.50			0.00				0.00					290,766,754.50
1710 110002050 Bank Check Cnts	USD		1,870,996.32			0.00				0.00					1,870,996.32
1710 110002080 Bank Cash Receipt	USD		201,121,976.31			0.00				100,569,599.55					301,991,576.26
1710 110008000 Da Fmnz Acq Bk (C/B)	USD		175,488.00			0.00				0.00					175,488.00
1710 110008000 Da Fmnz Acq Bk (C/B)	USD		1,000.00			0.00				0.00					1,000.00
1710 110008000 Revolut Assets Unaff	USD		99,830,956.15			0.00				0.00					99,830,956.15
1710 120420030 Revolut Assets Unaff	USD		1,675,261.18			0.00				0.00					1,675,261.18
1710 120430000 Eqt Secrs Inv	USD		1,993,332.32			0.00				36,666.67					1,956,665.65
1710 121000000 Revolute Domestic	EUR		29,672,978.20			0.00				4,223,344.36					33,859,275.56
1710 121000000 Revolute Domestic	EUR		1,000.00			0.00				0.00					1,000.00
1710 121000000 Revolute Domestic C 1 Revd	EUR		2,482,354.00			0.00				0.00					2,482,354.00
1710 121000000 Revolute Domestic Ady	EUR		54,354.32			0.00				0.00					54,354.32
1710 121000000 Cbkr Down Payments	USD		850.00			0.00				0.00					850.00
1710 121100000 Upymnt Requests Vend	USD		150,447.57			0.00				0.00					150,447.57
1710 121100000 Requests Foreign	USD		12,000.00			0.00				0.00					12,000.00
1710 121100000 Requests Foreign Ady	USD		100.00			0.00				0.00					100.00
1710 122000000 LR-Motex (RDU)	USD		28,576.14			0.00				0.00					28,576.14
1710 123000000 Revolute Affiliate	USD		140.40			0.00				421.20					561.60
1710 124011000 Revolut Revvl (Val)	USD		1,000.00			0.00				728,619.31					1,000.00
1710 124011000 Revolut Undlr Checks	USD		1,000.00			0.00				0.00					1,000.00
1710 125500000 Undlr Revolut	USD		15,493.55			0.00				0.00					15,493.55
1710 125610000 Prepaid Expenses	USD		2,050.00			0.00				0.00					2,050.00
1710 125900000 Vendors v/ Debit Bal	USD		10,905.22			0.00				0.00					10,905.22
1710 128010000 Board Inv Rtr Utra	USD		50,000.00			0.00				0.00					50,000.00
1710 128010000 Board Inv Rtr Matl	USD		28,169,309.08			0.00				11,187,000.00					1,619,275.51
1710 128020000 Inventory WIP	USD		450,700.12			0.00				0.00					450,700.12
1710 128020000 Inventory Semi Fini	USD		9,946,834.01			0.00				0.00					150.00
1710 128040000 Inventory Finishedsd	USD		1,459,951.76			0.00				2,336,251.69					1,400,055.11
1710 126000000 Inventory Tradingd	USD		6,508,771,178.58			0.00				1,154,341.62					6,506,223,455.96
1710 126000000 Inventory TradingdG	USD		1,000.00			0.00				0.00					1,000.00
1710 127000000 WIP Dev Rev	USD		4,402,246.55			0.00				0.00					4,402,246.55
1710 127110040 WIP Acc Rev	USD		0.00			0.00				2,270.20					2,270.20
1710 127111000 WIP Acc Rev	USD		4,401,708.70			0.00				0.00					4,401,708.70

Executive Summary:

Based on the G/L Account Balances report, here are the key insights:

1. Revenue:
 - The company generated domestic product revenue of \$4,223,226 and affiliate product revenue of \$526.50 during the period.
 - There were revenue adjustments of \$2,278.28 recorded.
2. Cost of Goods Sold (COGS):
 - COGS components like direct materials (\$1,694,481.95), material overhead (\$247,723.20), personnel time (\$195,490.00), and consumption of raw materials (\$1,615,071.90) and trading goods (\$694,369.42) was recorded.
3. Inventory:
 - Significant inventory balances were reported for raw materials (\$42,959,620.51), work-in-progress (\$456,789.22), and finished goods (\$1,000,000.00).
4. Receivables and Payables:
 - Domestic receivables stood at \$33,895,279.56, while domestic payables amounted to \$64,900,323.14.
 - Affiliate receivables were \$561.60, and affiliate payables were \$4,212.00.
5. Cash and Investments:
 - The company had significant cash balances in various bank accounts, totaling over \$300 million.
 - Short-term investments in unaffiliated entities were \$2,000,000, and long-term investments were \$10,000,000.
 - Bond investments, both short-term (\$99,850,906.15) and long-term (\$199,700,000), were substantial.
6. Debt:
 - Short-term bond payables were \$600,000,000, while long-term bond payables were \$100,000,000.
7. Other Expenses:
 - Bad debt expense of \$724,659.31 was recorded.
 - Interest income from unaffiliated sources (\$23,233.28) and bonds (\$873,113.14) was recognized.
 - Realized price gains on unaffiliated investments were \$1,873,553.53.
 - Commission/charges related to treasury operations were \$1,259,450.00.

Intelligent document processing

- Document processing is essential to business, serving as a primary tool in many mission-critical processes in industries as varied as finance, insurance, medical, legal, and more
- Faster processing time
- Improved accuracy
- Lowered personnel costs



Example: invoice automation

From hard copy

INVOICE									
Diesel Parts & Truck Specialists									
BIG TRUCK REPAIR SHOP									
800 E. 21st Street									
Anytown, TN 37615									
Phone: 222-333-4444 Fax: 222-555-6767									
Invoice: 905264									
Cust No: 1823									
Inv Date: 08/24/2017									
Shop WO: 32603									
Ticket No: AUT 935DZW									
Bill to: AARON RICHARD PO BOX 555 KNOXVILLE, MI 53812									
Ship to: AARON RICHARD PO BOX 555 KNOXVILLE, MI 53812									
Cust Ph: 111-568-7938									
Make	Model	Year	Miles	Eng Num	Eng Serial	Eng Hrs			
GMC	YUKON	2001	2,222,222	XX-ENGNUM-123	XX-12345	0.00			
P.O. No.	VIN:	Unit #	License	SWO Date	Terms	Plug Chk			
111111	1GKEK13T4J313581	YUKON	AUT 935DZW	7/20/2017	Net/30 Days				
Ship Qty	Parts	Description		Unit Price	Ext Price				
11.00	-10751-1	FITTING, ANCHOR 3/8		6.83	75.13				
1.00	-10744-5	UNION, 1/8" #2		3.71	3.71				
2.00	-10748-1	SLEEVE, 3/4"		4.00	8.00				
7.00	10987	NIPPLE, HOSE		4.00	28.00				
THIS WILL PRINT UNDER THE LINE ITEM ON THE WORK ORDER AND INVOICE.									
2.00	91-13	WIPER BLADE, 13"		8.09	16.18				
1.00	920049GL	LENS, RED BETTS		4.00	4.00				
1.00	9 SERVICE MTRHM-GAS	SERVICE MOTORHOME-GAS		400.00	400.00				
CHANGE OIL AND FILTERS, GREASE, CHECK NITRATE LEVEL IN COOLING SYSTEM, CHECK LIGHTS, TIRES, BELTS, HOSES AND ALL FLUID LEVELS. CHECK BRAKE AND CLUTCH ADJUSTMENTS. XXXXXXXXXXXX									
2.50	LABOR	LABOR		500.00	1,250.00				
THIS SECONDARY DESCRIPTION IS IMPORTED AUTOMATICALLY INTO THE WORK ORDER. IT MAY BE MODIFIED AS NECESSARY.									
THIS WILL PRINT ON THE INVOICE.									
THIS IS A TEST FOR THE 1st INVOICE MESSAGE									
This is the 2nd Invoice Message field in the SysMgr setup.									
Thank you for your business!									
Parts:	135.02								
Labor:	1,650.00								
Sales Tax:	4.33								
Total:	1,789.35								
Page: 1	Items processed: 8								

To system data



Data Entry View			
Document Number:	1900000053	Company Code:	1710
Document Date:	08/24/2017	Posting Date:	04/10/2025
Reference:	905264	Cross-Comp.No.:	
Currency:	USD	Texts Exist:	<input type="checkbox"/>
C...	Item	Key	Account
1710	1 40	12119200	FITTING, ANCHOR 3/8
	2 40	12119200	UNION, 1/8" #2
	3 40	12119200	SLEEVE, 3/4"
	4 40	12119200	NIPPLE, HOSE
	5 40	12119200	WIPER BLADE, 13"
	6 40	12119200	LENS, RED BETTS
	7 40	12119200	SERVICE MOTORHOME-GAS
	8 40	12119200	LABOR
	9 40	12119200	Tax/Others
	10 31	17300273	



Accounts Payable Manager

INTELLIGENT INVOICE AUDITING WITH GENERATIVE AI

Key challenges

- Maintaining compliance with time-consuming audit processes
- Gathering insights from documents and non-structured data

Benefits of generative AI

- Create generative AI audit assistants leveraging your financial data
- Gain insights on payments and receipts from invoices and other documents
- Create agents to perform complex tasks on unique processes at scale



Amazon Textract



Amazon Translate



Amazon S3



Amazon Bedrock



Accelerate AP audits with intelligent assistants

Accounts Payable Invoice
Audit Assistant

Finance Audit assistant

 Are there any trends or patterns in the types of services, suppliers, or payment methods over time?

 Based on the provided context, which includes several invoices, there are a few trends and patterns that can be observed:

1. Types of Services:
 - The invoices cover a variety of utility-related services, such as wave energy system construction, solar panel maintenance, water purification system maintenance, power plant maintenance, and green energy system installation.
 - The services span different time periods, ranging from 2026 to 2031.
2. Suppliers:
 - The invoices involve several different suppliers, including Wave Energy System Construction, SunPower Dynamics Inc., WaterGen Tech Ltd., PowerTech Solutions Inc., GreenWorks Ltd., and HydroCare Inc.
 - The suppliers appear to be specialized in the respective utility-related services they provide.
3. Payment Methods:
 - The payment status for the invoices varies, with some being "Paid", others "Processing", and some "Pending".
 - The payment methods mentioned include payment via cheque and payment processing pending.

Your message



 which invoices were not paid on time , provide detailed information about those invoices ?

 Based on the provided context, the following invoices were not paid on time:

1. "BusinessCode","SupplierID","SupplierName","ItemID","ItemDescription","DueDateOfInvoice","BusinessCode" "1710","17300273","BIG TRUCK REPAIR SHOP","-10751-1","FITTING, ANCHOR
3/8","08/24/2017","2017","08/24/2017","1900000025","03/08/2024","Late payment due to
missed submission by vendor verification in progress","Pending","75.1300 ","USD"
"1710","17300273","BIG TRUCK REPAIR SHOP","-10744-5","UNION, 1/8"
#-2,"08/24/2017","2017","08/24/2017","1900000025","03/08/2024","Late payment due to
missed submission by vendor verification in progress","Pending","3.7100 ","USD"
"1710","17300273","BIG TRUCK REPAIR SHOP","-10748-1","SLEEVE,
3/4","","08/24/2017","2017","08/24/2017","1900000025","03/08/2024","Late payment due to
missed submission by vendor verification in progress","Pending","8.0000"

The key details about these invoices are:

- The invoices are from the supplier "BIG TRUCK REPAIR SHOP" with supplier ID "17300273".
- The invoice dates are all "08/24/2017" but the due dates are "03/08/2024", indicating a significant delay in payment.
- The comments state "Late payment due to missed submission by vendor verification in progress", suggesting the payment is pending due to issues with the vendor verification process.
- The status of these invoices is "Pending", meaning they have not been paid yet.

Your message



Technician Assistant from KONE



KONE Powers Responsible AI Field Service with Amazon Bedrock | Amazon Web Services

820 views • 3 months ago



Amazon Web Services ✓

KONE Corporation, a global leader in elevators and escalators, implemented a generative AI solution using Amazon Bedrock to ...

CC

https://www.youtube.com/watch?v=oTTW_gOgwHA



As a global leader in the elevator
and escalator industry, we shape
the future of cities

Founded in

1910

100+ years of experience in
the elevator industry

Over

1.6M

units maintained

Moving

2B

people per day

Over

60,000

employees

Close to

600,000

customers worldwide

Around

100,000

maintenance visits per day

Challenges in maintenance

Diverse maintenance products

- Elevators, escalator, automatic doors, etc.
- KONE, 10+ other companies

Technician generation shift

- Experienced technicians retire or switch jobs
- Young technicians have less experience but are digitally native



Technician Assistant

40,000

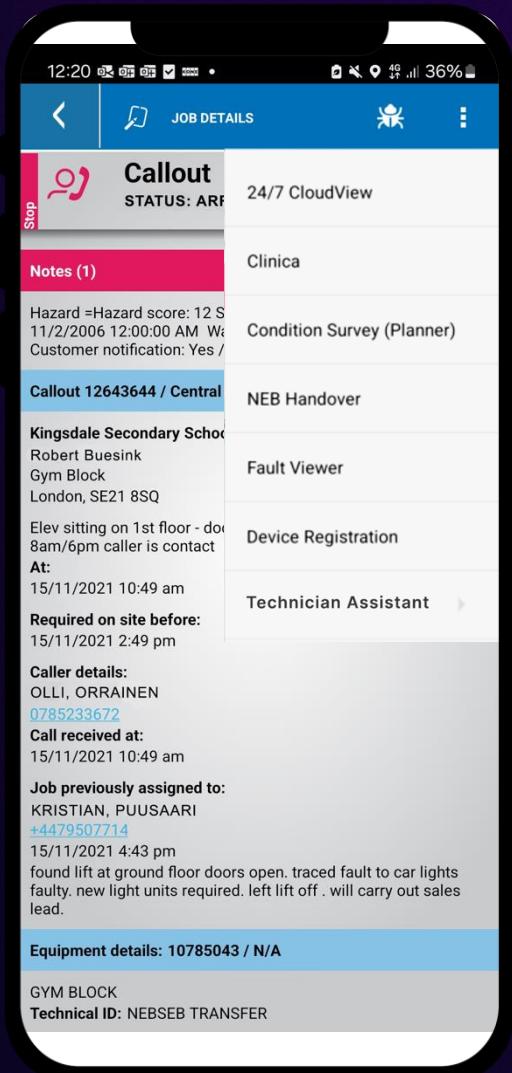
Technicians

100,000

Visits per day



Doors keep opening & closing?



6

Months from idea to global pilot

250+

End user field trials in four countries (Europe and Asia)

Evaluate context – In-house solution



Doors keep opening & closing?



Retrieved Documents



LLM
as a
Judge

Your task is to evaluate whether a document is relevant to a given issue. The issue is in `<issue>` tags. The document is in `<document></document>` tags.

```
<issue>{issue}</issue>
<document>{document}</document>
```

First, explain your *reasoning* very briefly in a single sentence inside `<reasoning>` tags.

Then, provide evaluation *score* (0 or 1) inside `<score>` tags.

Scoring criteria:

- 1: The document resolves the current issue and provides sufficient detail.
- 0: Otherwise



Binary Scores

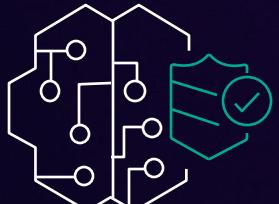
Evaluate context – Managed solution



Doors keep opening & closing?



Retrieved Documents



Amazon Bedrock
Guardrails

- Relevance check
- Faster responses
- Cost effective
- Fully managed
- Easy integration
- No maintenance



0.94



0.21



0.54



0.87



0.36

Detailed Scores

Evaluate context – Faster & cheaper



Doors keep opening &
closing?



Retrieved Documents

2x↑
faster

↓38%
cheaper

- Relevance check
- Faster responses
- Fully managed
- Elimination
- No maintenance

* pre-production results



0.94



0.21



0.54



0.87



0.36

Detailed
Scores



Achievements

Actual Impact



200+ technician issues solved

Growing User Base



250+ technicians, 4 countries, 4 languages

User Co-creation



Daily interaction with users

“Perfetto”

“Problem solved, it was an obstruction in the photocell”

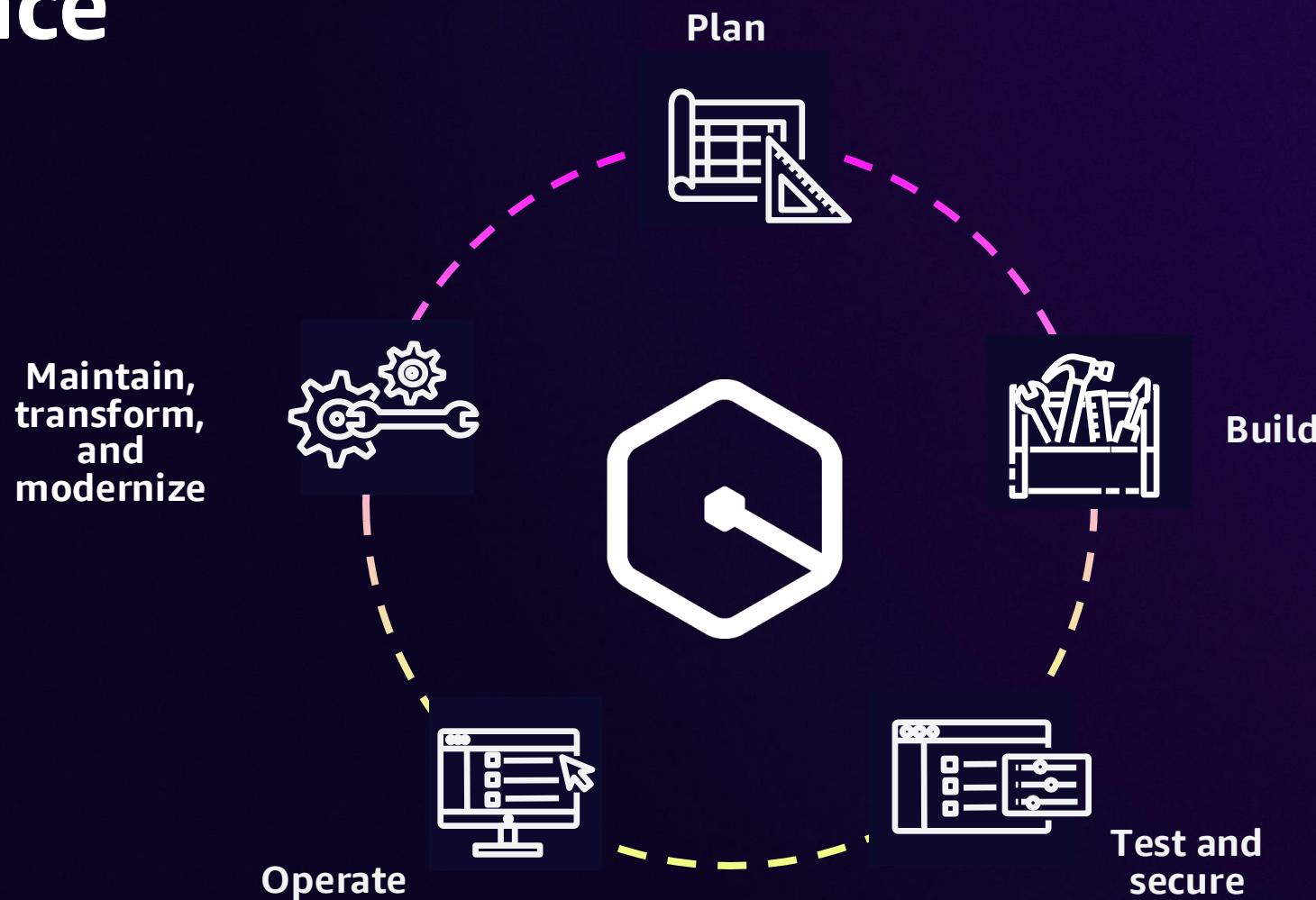
“It benefits the young, the current, the old!”

Modernize Legacy Applications



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Amazon Q Developer transforms the development experience



Amazon Q Developer transformation capabilities

WORKLOADS



**.NET Framework
applications
on Windows**

Repository connection
Repository selection
Transformation
Review



**Linux-ready
cross-platform
.NET applications**



**Java applications
in v8, v11, v17, v21**

Build/test v8/v11/v17/v21
Apply knowledge base
Build/test v17/v21
Error fixing using genAI
Continuous maintenance



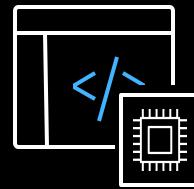
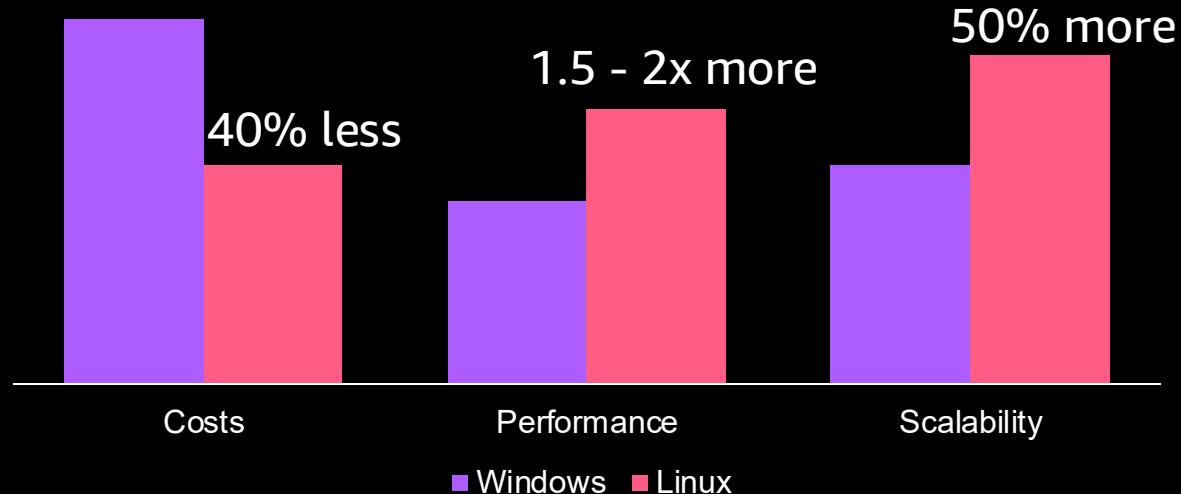
**Java applications
in v17/v21**

Amazon Q Developer **.NET porting**

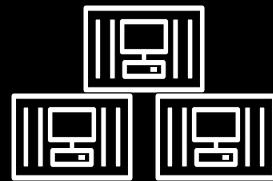


Why modernize .NET apps from Windows to Linux?

Customers have reduced their Windows usage by over 70% to adopt Linux



Compatible with x86-64
and ARM64



Lightweight containers



Serverless architecture
with Lambda



Modernizing can cut compute costs substantially

Examples of EC2 hourly pricing for the same instance type/size

<u>Instance</u>	<u>Windows</u>	<u>Linux</u>	<u>Savings vs. Windows</u>
m7i.2xlarge	\$0.7712	\$0.4032	47.7% savings
c7i.4xlarge	\$1.450	\$0.714	50.8% savings
r7i.8xlarge	\$3.5888	\$2.1168	41.0% savings

Additional savings by moving to Graviton instances

<u>Instance</u>		<u>Linux</u>	<u>vs. Intel+Windows</u>	<u>vs. Intel+Linux</u>
m7g.2xlarge	—	\$0.3264	57.7% savings	19% savings
c7g.4xlarge	—	\$0.5781	60.1% savings	19% savings
r8g.8xlarge	—	\$1.88512	47.5% savings	11% savings

*Ohio region, July 2024

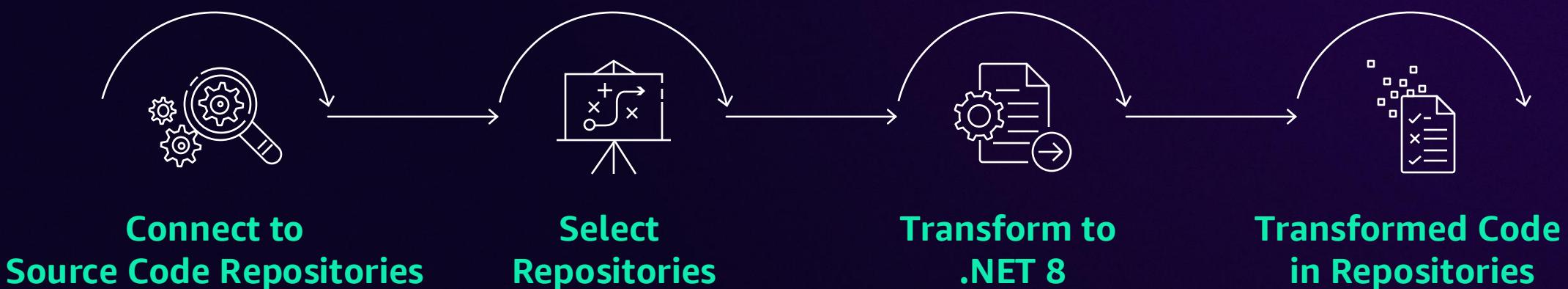


Q Developer .NET porting

THE FIRST GENERATIVE AI-POWERED ASSISTANT FOR LARGE-SCALE PORTING OF .NET APPLICATIONS

.NET Framework
on Windows

Cross-platform
.NET on Linux



Thomson Reuters turbocharged .NET modernization with AWS Transform

CHALLENGES

Thomson Reuters was struggling with **expensive**, time-consuming **maintenance** of legacy .NET Framework applications that were impeding innovation and competing with their roadmap priorities.

SOLUTIONS

The company implemented AWS Transform, an agentic AI-powered tool designed for **large-scale** .NET modernization that enables parallel processing through both **web interface** and **IDE integration**.

RESULTS

- › Modernized 4x faster: **1.5M lines of code/month**
- › **30% cost savings** moving to Linux
- › 70% reduction in technical debt
- › Transformation time: **2 weeks** vs. months

"AWS Transform felt like an extension of our team—constantly learning, optimizing, and helping us move faster."

Matt Dimich

VP, Platform Engineering Enablement at Thomson Reuters

CUSTOMER PROFILE



INDUSTRY
Financial Services

REGION
United States/Global

As a global tech and AI leader powering the legal, tax, and compliance industries, Thomson Reuters is always looking for smarter, faster ways to build. That means staying ahead of the curve—and teaming up with partners like AWS to push what's possible.



Amazon Q Developer **Java upgrades**



Q Developer Java upgrades



V8, v11, v17, v21



V17, v21



Build & test
Java 8,11,17,21



Apply Knowledge Base



Build & Test
Java 17,21



Fix Errors with GenAI



Continuous Maintenance

Amazon's internal use of Amazon Q



CEO Andy Jassy reported in a recent [LinkedIn post](#) that the internal developer tooling team used Q Developer's new code transformation capability—specifically integrating it with internal development systems—to automate the process of upgrading over 30,000 applications from Java 8 or 11 to Java 17, saving over 4,500 developer years compared to manual upgrades.

Source: <https://news.a2z.com/contents/38885081>

LinkedIn post: https://www.linkedin.com/posts/andy-jassy-8b1615_one-of-the-most-tedious-but-critical-tasks-activity-7232374162185461760-AdSz/?utm_source=share&utm_medium=member_desktop

The Road Ahead



Embark on your Generative AI Journey



Move quickly

- Identify use cases that are relevant, viable, and impactful
- Leveraging your data is the key to maximizing the potential of generative AI
- Empower your entire workforce, regardless of their AI expertise



Customize

- Customize to deliver differentiated experiences
- Ensure your data is readily accessible and ready for AI



Scale

- Measure and track the business value and ROI as you scale
- Optimize for your cost, latency, and accuracy needs
- Manage risk, maintain trust, and build responsibly with strong compliance and governance

Thank you!

Michael Lin

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