AWSFINANCIAL SERVICESCLOUD SYMPOSIUM

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FSI501

How AWS is innovating to support its Financial Services customers

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Agenda Layout

How to learn and innovate with AWS

FSI customer needs: Foundational, Data, AI/ML

- Foundational: Governance, Compute and Deployment
- Data: Collect, Cleanse, Consume
- AI/ML: Reduce the 80% and add real value





How to learn and innovate with AWS



At AWS, we're always innovating on behalf of our customers

New services and features:

80	160	280	516	722	1,017	1,430	1,957	2,345
2011	'12	'13	'14	'15	'16	'17	'18	'19



You don't have to know everything. You just have to know where to find it.

Albert Einstein



Financial Services - Amazon Web Services

https://aws.amazon.com/financial-services/

AWS Financial Services is How. Contact an industry expert **AWS** provides **financial services** institutions across banking, payments, capital markets, and insurance the secure, resilient global cloud infrastructure and **services** they need to differentiate themselves today and adapt to the needs of tomorrow.

AWS Architecture Center - Amazon Web Services (AWS)

https://aws.amazon.com/architecture/

AWS Architecture Center. The **AWS Architecture Center** provides reference **architecture** diagrams, vetted **architecture** solutions, Well-Architected best practices, patterns, icons, and more. This expert guidance was contributed by **AWS** cloud **architecture** experts, including **AWS** Solutions Architects, Professional Services Consultants, and Partners.

This Is My Architecture | Video Series | AWS

https://aws.amazon.com/architecture/this-is-my-architecture/

AWS Blog - Amazon Web Services (AWS)

https://aws.amazon.com/blogs/





FSI Customer needs: Foundational: Governance, Compute and Deployment



Governance

Lookout for Metrics - Use ML to detect anomalies in time series-driven business and operational metrics Well-Architected Management & Governance Lens - Newest addition to our Well-Architected Framework Audit Manager - Automates evidence collection to determine if your controls are operating correctly S3 Replication multiple destination buckets - Replicate data from one source bucket to multiple destination buckets in the same or other (if desired - multiple) regions

Compute and Deployment

Nitro Enclaves - Create isolated compute environments on your EC2 instances to protect highly sensitive data ECS Anywhere - Run and manage container based applications that are located both in AWS and on-premises - Distribution of the same version Kubernetes deployed by Amazon EKS **EKS** Distro EKS Anywhere - Create and operate Kubernetes clusters on-premises on your own VMs and bare metal servers - Fully managed application deployment service for container and serverless applications Proton





FSI Customer needs: Data: Collect, Cleanse, Consume



Collect

Lake Formation new features - ACID Transactions, Row-level Security and Acceleration (improved performance)previewAurora Serverless v2 - on-demand, auto-scaling configuration that scales instantlypreview

Cleanse

EMR on EKS - Automate the provisioning and management of open-source big data frameworks on EKSblogGlue Data Brew - Visual interface for analyzing and cleansing data, automating jobs and data lineageblog

Consume

Glue Elastic Views - Use SQL to create a virtual always up-to-date table that contains data from many sourcespreviewAQUA for Redshift - Queries are executed up to 10x faster using a distributed and hardware accelerated cachepreviewRedshift data sharing - Share live data between multiple Redshift data warehouses with granular securitypreviewRedshift ML - Enable SQL users to create, train and deploy SageMaker models that use supervised learningpreviewNeptune ML - Utilize Graph Neural Networks to make fast and more accurate predictions with graph datablog





FSI Customer needs: AI/ML: Reduce the 80% and add real value

Decrease the amount of time it takes to:

- Prepare your data
- Build your model
- Train and Tune your model
- Deploy and Manage your model





Amazon SageMaker Clarify - provides transparency so you can detect bias and take corrective action	<u>blog</u>
SageMaker Data Wrangler - visual interface for finding, viewing, cleansing and enriching your training data	<u>blog</u>
SageMaker Debugger Profiler - Resolve performance issues quicker and iterate through your training job faster	<u>blog</u>
SageMaker distributed training - Split large deep learning training data / models across AWS GPU instances	
SageMaker Feature Store - Build a curated library of data (features) for your models	<u>blog</u>
SageMaker JumpStart - One click access to popular model collections	<u>blog</u>
SageMaker Pipelines - Create an automated CI/CD ML workflow	blog





Thank you!

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