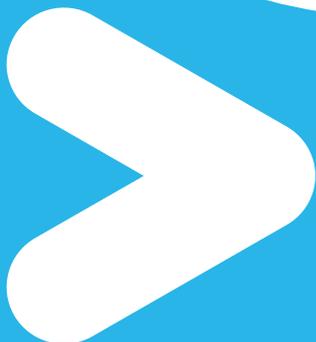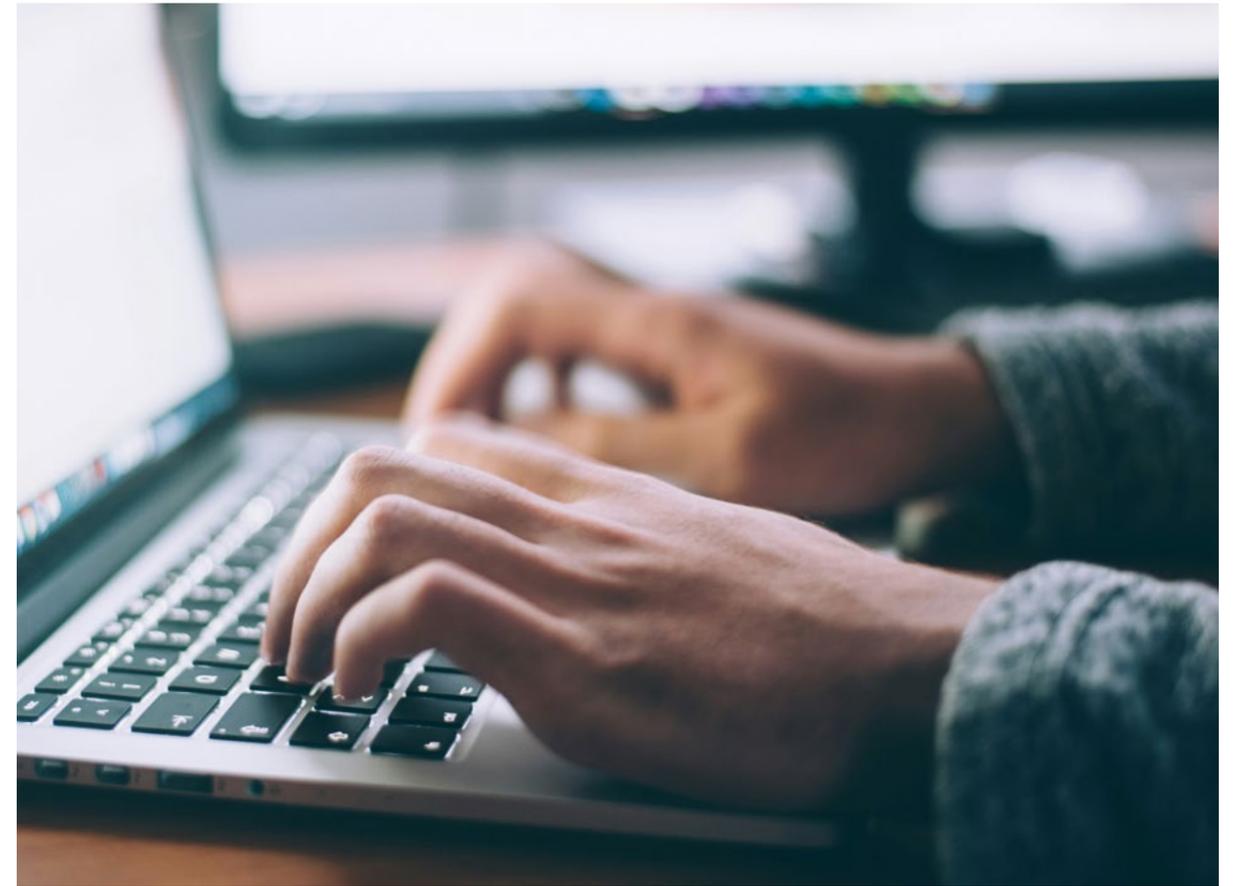Go From AI Proof of Concept to AI Return on Investment by

UNLOCKING UNSTRUCTURED DATA

HARNESS UNTAPPED ANALYTICS POTENTIAL ACROSS YOUR ORGANISATION WITH SNOWFLAKE AND AWS

What if your next competitive edge is in data you already have?

AI workflows are turning data into action. Understanding large amounts of customer, product and operations data, from sales, social media, call centers, surveys, contracts, and more can hold the key to untapped revenue potential and cost efficiencies. Of course, there are plenty of existing analytics solutions, but few manage to bring together the entirety of business intelligence across both structured and unstructured data. The question is, why? One reason is that unstructured data, like text, documents, images and videos, is famously challenging to process. However, missing this part of the equation means potentially missing insights from up to 80% of all your data. There's good news though. Help is on the way.

Gen AI and powerful Large Language Models (LLMs) can help turn unstructured data into actionable insights. But while organisations have been experimenting with AI, many companies are struggling to move past proof of concepts (PoCs) due to issues around data quality, scalability, and governance. Too often, the cost of building a solution begins to outweigh the return on investment. In this white paper, we'll explore the opportunities around unstructured data, the role Gen AI can play, and how Snowflake and Amazon Web Services (AWS) technology can help you get to production ready capabilities that enhance decision making, grow customer revenue opportunities, and automate workflows to power innovation.

IMPROVING CUSTOMER EXPERIENCE & PRODUCTIVITY:
THE REAL UNSTRUCTURED ANALYTICS OPPORTUNITY

The rapid development of multimodal data processing means teams across your organisation can collaborate on new workflows and insights faster than ever before.

There are plenty of powerful use cases that can be unlocked by Generative AI. For example:

Customer intelligence teams can analyse reviews and social media posts alongside sales data to identify sentiment trends and customer trends.

Support and sales teams can provide personalised recommendations through chat and uncover recurring issues across tickets to inform gaps in your product or service roadmap.

Operations teams can use entity extraction on PDFs to automate workflows and enable metadata-driven downstream analysis.

These are three varied use cases spanning the breadth of an organisation, but they largely cluster around one key issue: using AI-powered data processing to better understand your customers, products, market and business.

Multimodal inference

**One component of high-impact AI analytics is integrated multimodal analytics.
Faster access and processing across all data types reduces information silos and improves outputs for actionable insights without delays from painful integrations.**

THE CURRENT CHALLENGES AROUND
UNSTRUCTURED DATA

With the growing need to combine insights from all sources of data, traditional analytics tools and pipelines can struggle to also process documents, text, images and video. That's where the latest developments in LLMs can help.

LLMs can offer key advantages over traditional analytics tools when analysing unstructured data:

> Accuracy: Thanks to vast multilingual training data and rapid model improvements, LLMs offer much higher accuracy out of the box compared to legacy analytics tools across entity extraction, summarisation, translation and categorisation.

> Efficiency: LLMs are more cost effective compared to traditional natural language processing services and can be faster to manage and deploy.

> Flexibility: LLMs support a broader set of languages and prompts can be used to adjust output structure. Fine-tuning can further refine results with model-, company- or industry-specific training.

HOW DO YOU MOVE BEYOND
INTEGRATION COMPLEXITY AND
PRODUCTION DELAYS?

While LLMs are, at least in theory, a silver bullet to the challenge of analysing unstructured data, many organisations are still struggling to scale them beyond pilots and PoCs.

Furthermore, organisations increasingly only commit to AI use cases that show the greatest ROI. This can happen for many reasons:

> Data quality delays projects and usability of analytics

> Talent shortages can create a project backlog — especially for projects involving rapidly-evolving tools like LLMs

> Governance as data pipeline complexity can make it difficult to properly observe and govern data as it flows in and out of LLMs

> Legacy systems can silo valuable data and limit scalability

Moving beyond PoC into production requires every stakeholder to see a clear connection between the cost of deployment and ownership, and long-term value and ROI. Any project will need to demonstrate value through clear metrics such as reduced customer churn, faster processing times or increased sales.

KEY TECHNOLOGIES THAT TURN POCS INTO CLEAR VALUE

To overcome these common challenges and take AI use cases beyond PoCs, you need infrastructure that can support the latest models and analytics technologies. At the same time, you need to make sure your AI stack can also scale effectively — all without adding unnecessary costs and quality concerns that might weaken the business impact.
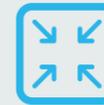
While you could turn to a single major technology provider, finding a partnership between infrastructure leaders and data experts can help you get the best of all worlds. That's exactly why so many organisations are combining Snowflake and AWS services.

Together, Snowflake and AWS bring the data analytics expertise, extensive cloud infrastructure, and trustworthy outputs, making it easier than ever to integrate into enterprise workflows.

Snowflake's AI Data Cloud bridges the gap between business outcomes and technology solutions with capabilities built data-first, improving transparency and governance to support security, efficiency and compliance.

With Snowflake, you can:

Reduce time to insight with quality outputs and high-throughput processing using low code functions that access industry leading foundational models

Easily build fully managed, efficient data pipelines and retrieval services to seamlessly blend insights from structured and unstructured data

Eliminate complexity with task-specific functions like classification, aggregation, transcription, and entity extraction with Cortex AI without requiring users to select a model or engineer complex prompts

Using AWS infrastructure and solutions, you can:
Define and customise outputs to generate insights tailored to business needs and compatible with downstream applications

Empower AI agents to handle complex data extraction, interpretation and action workflows and turn unstructured data into actionable insight

Orchestrate multistep tasks by seamlessly connecting AWS AI tools with company systems, APIs and data sources

Together the two platforms offer scalable data solutions, state-of-the-art processing capabilities and multi-modal processing that:

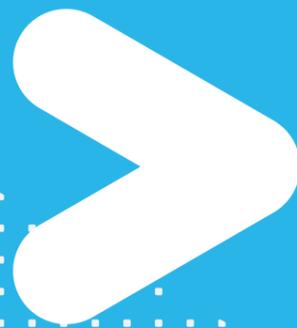**Accelerates** time to insight from months to days

Scales processing workflows

Simplifies infrastructure management

Reduces overhead and inference costs

Supports data governance, auditability and observability

MULTIMODAL ANALYTICS MADE SIMPLER
WITH SNOWFLAKE & AWS

A large part of a successful unstructured data analytics drive will come down to multimodal analytics to extract insights from images, audio and video.

However, the challenge of building solutions across formats is:

> You may need multiple services to create and manage data-to-AI pipelines

> You'll need to track costs to make sure they don't balloon and eat into your ROI

Batch-optimised processes can help here. But they also need to offer flexible LLM options and easy integration with existing data pipelines for full end-to-end observability and adoption. Combining Snowflake and AWS brings flexibility and efficiency without compromising on functionality.

The two platforms also offer several other benefits, including:

> A unified data architecture with a seamless environment for both structured and unstructured data

> Faster time to value with pre-built integrations

> Elastic resource management and processing efficiency

Security and governance features such as:
> Secure cross-platform data sharing

> Direct access to Amazon Bedrock endpoints from Snowflake

> Network rules and role-based access controls that maintain security and governance

Crucially, Snowflake and AWS together let you orchestrate activities from either platform based on the needs of your use case.

JET2 ANALYSES CUSTOMER SENTIMENT ACROSS THOUSANDS OF DAILY SERVICE CALLS

Jet2 has been using Snowflake's AI Data Cloud to scale its data and its understanding of customer intent. And now, using Cortex AI, Jet2 has been making the most of large language models (LLMs) to analyse customer intent and sentiment across thousands of call transcripts.

The challenge
Jet2 sits on a wealth of unstructured data in its contact center. But with thousands of calls a day, some of which can stretch to 40 minutes, turning that data into insight is a challenge. The company began assessing data analytics and LLM technologies to help summarise this content.

The solution
In just three months, the UK's largest tour operator went from no LLM experience to a production ready large language model. With Snowflake's Cortex AI, Jet2 used familiar SQL code to deploy a fine-tuned Mistral model that achieves the right balance between cost, complexity and accuracy.

The results
Jet2 now analyses over 2,000 customer service call transcripts per day to better understand customer needs and intent. By analysing this unstructured data, Jet2 can identify key trends and tailor its products and services to changing customer demands.

"Our growth has come down to two things: understanding what customers want, and then delivering it. Snowflake gives us the insights we need to take this even further."

Steve Heapy, CEO, Jet2

TURN YOUR UNSTRUCTURED DATA INTO COMPETITIVE ADVANTAGE

SNOWFLAKE'S AI DATA CLOUD BRIDGES THE GAP BETWEEN BUSINESS OUTCOMES AND TECHNOLOGY SOLUTIONS

UNLOCKING INSIGHTS FROM THE OTHER 80% OF YOUR DATA WILL BE THE KEY TO BUILDING COMPETITIVE ADVANTAGE THROUGH CUSTOMER EXPERIENCE AND PRODUCTIVITY.

AI solutions can enable this but businesses will need to move from experiments to production for adoption and scale. The next step can only be achieved with platforms that reduce time to insight by delivering capabilities that collect and orchestrate analytics between data, pipelines, and model outputs.

More importantly, your technology stack also needs to deliver a clear return on any AI use cases — and that means avoiding complexity and costs. Few technology providers can offer all of these elements. And even with a multi-vendor data stack behind you, your organisation risks inviting complexity and administrative burden at a time when data and AI skills are in high demand.

The answer is to find vendors with the right solutions working in concert as part of a close partnership. That's exactly what you get with Snowflake and AWS. As data and AI leaders working closely together, they can offer everything you need for data-driven business agility and an AI-empowered workforce. To learn more about how Snowflake and AWS can help you unlock productivity and business intelligence, speak to one of our experts.

Snowflake is the platform for the AI era, making it easy for enterprises to innovate faster and get more value from data. More than 11,000 companies around the globe, including hundreds of the world's largest, use Snowflake's AI Data Cloud to build, use and share data, applications and AI. With Snowflake, data and AI are transformative for everyone.

Learn more at snowflake.com (NYSE: SNOW).