snowflake®

TELECOM AI TRANSFORMATION: COMPREHENSIVE STRATEGY AND USE CASES

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CHAPTER 1:

THE LAY OF THE LAND

It's not an underestimation to say that a world without telecommunications is like a world without electricity: screeched to a halt, unproductive and profoundly disconnected in myriad ways. The sector is the lifeblood of the over **$105 trillion global economy**, powering nearly every one of the over **358 million businesses around the world**. Network consumption is only increasing primarily driven by a continued **growth in video traffic** — leaving many telecom operators to ask how will they keep up — and elevate above their competitors in a highly rivalrous environment. Not to mention, how will they manage the high cost of doing business and advance a much-needed increase in profit margins?

AI EXCITEMENT, CONFUSION AND COMPLEXITY

AI has arrived at a fortuitous time for the telecommunications industry. Given its incredible ability to drive immense business and cost efficiencies, network optimization and revenue streams, it has become a top priority among telecom decision-makers. But despite the fervent enthusiasm of many service providers, there is confusion and a lack of knowledge about what it takes to effectively, efficiently and securely implement enterprise AI.

Enterprise AI implementation requires critical prerequisites and strategies such as ensuring access to high-quality data by adopting fully managed data platforms that break down data silos and carry the necessary compliance, security and governance capabilities. Also adding to the challenging conundrum faced by operators is the tremendous complexity of existing legacy systems and the lack of awareness of how to best collect, cleanse and utilize valuable telecom data to power growth initiatives.

> "AI is integral to providing cost reductions and efficiencies for service providers, freeing them up to focus on meaningful revenue generation."
>
> **—PHIL KIPPEN**
> Global Industry GTM Lead,
> Telecommunications, Snowflake

Telecoms are also very aware that AI comes with data security risks; risks that can be costly on many fronts — from hefty regulatory fines to painful reputational damage. The industry is one of the most highly regulated (GDPR, CCPA, Digital Services Act, etc.), and there are more regulations on the way for operators to navigate as they modernize toward the AI-powered telecom. For example, in the U.S. alone, lawmakers introduced **more than 100 bills regarding AI** in just the fall of 2024 while other countries have already enacted AI regulations — for instance, the **EU's Artificial Intelligence Act** and **Brazil's AI Bill**.

Additionally, the breakneck pace at which AI continues to advance will not only benefit telecoms but also place high demands on the network as the demands on and need for more **data centers will increase substantially**. Additionally, AI innovation will pave the way for incredible advances such as quantum computing, advanced AI and 7G powered by **self-directed AI** in the not-so-distant future — all impacting how the network is configured, operated and managed.

This ebook explores the decisive role AI has to play in transforming the telecommunications industry, including key use cases such as optimizing the network and customer experience. It also explores how a robust data strategy is integral to AI success and why Snowflake is a trusted partner on telecom's AI journey, providing a reliable, secure and easy-to-use platform and AI solutions.

CHAPTER 2:

AI IS CORE TO TELECOM TRANSFORMATION

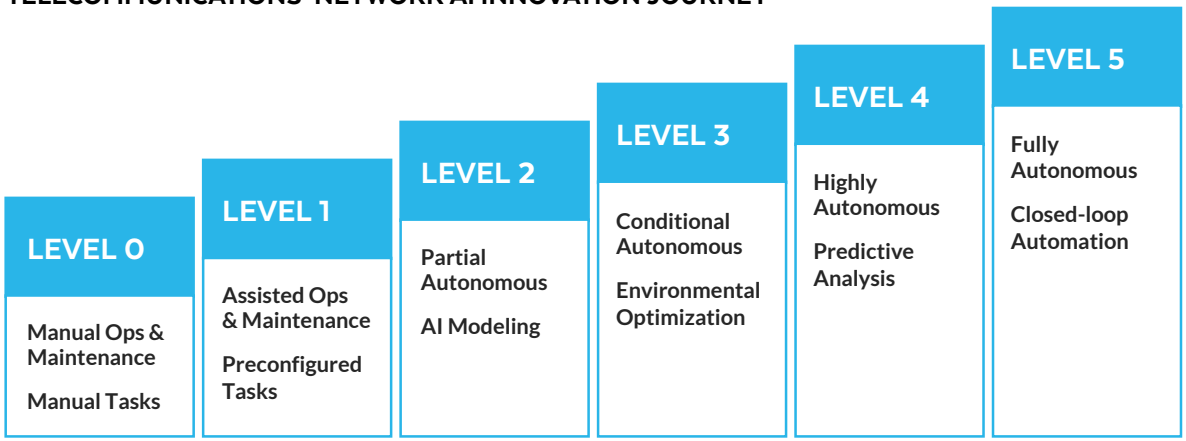
Imagine telecoms transforming from a utility service to an intelligent, adaptive ecosystem — and AI is the driving force making it happen. Today's leading service providers are using AI to completely reshape how they connect with customers, predict their needs, deliver services, and, very importantly, reduce costs and power efficiencies across the business.

Think of AI as the catalyst that helps telecoms understand their customers better than ever before: predicting when a customer might need a plan upgrade, personalizing marketing messages that actually feel relevant, and creating support experiences so smooth that customers barely notice the complex technology working behind the scenes. By leveraging ML and predictive analytics, these companies are turning mountains of data into laser-focused insights that can optimize everything from network performance to customer satisfaction.

> "Leading service providers are using AI to completely reshape how they connect with customers, predict their needs, deliver services, and, very importantly, reduce costs and power efficiencies throughout the business."

But here's where it gets really exciting: the future of telecom isn't just about better service — it's about creating entirely new digital experiences and new revenue streams such as data monetization. As we look toward emerging technologies like 6G and the whispers of an AI-powered 7G, telecom providers are positioning themselves as more than just network infrastructure companies. They're becoming digital innovators, using AI to build adaptive, intelligent platforms that can predict market trends, dynamically adjust to customer behaviors, and create services we're just starting to imagine today. It's like watching an entire industry evolve in real-time, with artificial intelligence acting as the blueprint for a more connected, intuitive and responsive digital world. The most forward-thinking service operators aren't just implementing AI — they're reimagining what's possible when technology becomes truly intelligent.

TELECOMMUNICATIONS' NETWORK AI INNOVATION JOURNEY



THE EVOLUTION OF TELECOMS' CAPABILITIES WITH AI-POWERED INNOVATION

Level 1: Manual Operations and Maintenance: In this foundational stage, network management relies heavily on human intervention. Technical teams must monitor and execute every dynamic task, creating a labor-intensive environment where system adjustments and problem-solving depend entirely on manual human expertise and real-time decision-making.

Level 2: Assisted Operations and Maintenance: Introducing initial process optimization, this stage allows the system to execute specific, repetitive subtasks based on preconfigured parameters. By automating standard, predictable processes, organizations can significantly increase operational efficiency, reducing human workload, and minimizing the potential for manual error in routine network management activities.

Level 3: Partial Autonomous Network: At this level, the system begins to demonstrate more sophisticated capabilities, enabling closed-loop operations for specific network units through advanced AI modeling. Under controlled external environments, the network can now perform limited self-management tasks, making basic independent decisions within predefined constraints and learning from its operational patterns.

Level 4: Conditional Autonomous Network: Here, the system evolves to sense and respond to real-time environmental changes across specific network domains. By developing the ability to self-optimize and dynamically adjust to external conditions, the network can now enable intent-based, closed-loop management, anticipating and resolving potential issues before they impact performance.

Level 5: Highly Autonomous Network: Operating in increasingly complex, cross-domain environments, the system now leverages predictive analysis to make sophisticated decisions. This stage emphasizes proactive, customer experience-driven network management, with the ability to conduct active closed-loop management that considers multiple service parameters and potential future scenarios.

Level 6: Fully Autonomous Network: The pinnacle of network autonomy, this stage represents comprehensive closed-loop automation across multiple services and domains. The system can now independently manage its entire lifecycle, seamlessly integrating and optimizing operations not just within its own infrastructure, but also extending to partner domains, creating a truly intelligent, self-sustaining network ecosystem.

> Now is a great time for telecoms to evolve beyond the 'dump pipe' motion to drive new revenue. Although important, expanding bandwidth only gets you so far and hinders business growth. Telecom IT organizations must adopt modern data architectures to transition to a decentralized, federated architecture that powers AI and enables greater monetization and network and business efficiencies."

—JON PENROSE
Industry Principal,
Telecommunications, Snowflake

TELECOM'S AI SUCCESS HINGES ON A ROBUST DATA STRATEGY

The wealth of telecom's diverse and valuable data today is scattered across the entire enterprise — a fragmented resource ready to be unlocked. Imagine if this data could be harnessed as a powerful, unified strategic asset — with intelligent data management the driving force making it happen. For today's leading telecoms, data isn't just information — it's the lifeblood of AI innovation and profitability. Think of a comprehensive data strategy as a supercharged digital conductor that helps organizations orchestrate their most valuable resource: turning raw information into a clean, secure and adaptable strategic powerhouse that ignites growth. By leveraging modern data platforms, companies are breaking down traditional silos across operations support system (OSS), business support system (BSS) data and beyond; surfacing laser-focused insights that can transform everything from AI model performance to organizational decision-making.

But the future of enterprise AI isn't just about collecting and cleansing data — it's about creating an entirely new approach to information management. As we look toward increasingly complex technological ecosystems, forward-thinking organizations are positioning themselves as more than just data collectors. They're becoming digital architects, using cloud-based platforms to build adaptive, intelligent data environments that seamlessly integrate information from internal teams, external partners and third-party sources. It's like watching an entire approach to data evolve in real time (literally and figuratively), with intelligent management acting as the blueprint for a more connected, secure and dynamically responsive digital infrastructure. The most innovative enterprises aren't just implementing data strategies — they're reimagining what's possible when information becomes a truly strategic, governable asset.

3 BENEFITS OF MODERN DATA PLATFORMS

1. Break down silos: Keeping data siloed makes it harder to share and creates more complexity, which impedes collaboration and slows the pace of innovation. Critical for telecom operators, their business systems data must be unified with their operational network data, empowering telecoms to utilize their strategic networking assets, as an intelligence driver to optimize customer experience and surface growth opportunities. Collecting data in one place is a necessary first step toward getting it ready for AI. A modern data platform can gather all the data within a single location and democratize access across the organization without compromising its integrity.

2. Build a flexible, governed and scalable data infrastructure: IT environments are rarely homogeneous, and this is especially true for telecom organizations. Hybrid on-premises and multi-cloud architectures are the norm. Regardless of the diversity of the on-prem and cloud systems in the mix, companies across the industry need the ability to coalesce huge volumes of first- and third-party data, while also enforcing strict data governance and security policies. A modern data platform is critical for securely sharing and analyzing data across the business without compromising any sensitive or proprietary information, or running afoul of regulations.

3. Leverage built in AI and ML capabilities: Modern cloud-native platforms like Snowflake also have built-in AI and ML functionality, allowing telecoms to easily implement AI/ML solutions across the business without moving or copying data to another solution or platform. This allows enterprises to bring AI to the data but also retains valuable business data in one place, where it can be secured, governed and compliant. **Leading enterprises** today are adopting modern data platforms to securely and efficiently implement a wide range of AI/ML solutions to deliver myriad business benefits.

ARE YOU READY FOR AI? KEY QUESTIONS YOU NEED TO ASK

With time-to-value and cost efficiency being top of mind, here are a few important questions telecoms should ask before starting on their AI journey:

- How confident are we in the quality and governance of our data foundation?
- Do we have a single, unified view of our data across the business?
- How does this AI solution align with our overall data and business strategy and goals?
- Have we clearly defined our KPIs? How often will we measure them to ensure ROI?
- What is the total cost of ownership (TCO) for the solution or project, including additional costs like maintenance, training and future upgrades?
- Can the solution evolve with our business needs and as technology and the industry continue to mature?

Top 5 things to look for an AI Data Cloud platform:

1. Easy to use, fully managed and cost efficient
2. Reduces tech and business and operational complexity
3. Enables data quality and data collaboration without movement or copying data
4. Native AI/ML and app functionality
5. Offers compliance, security and governance controls, and includes a **Trust Center**

CHAPTER 3:

SNOWFLAKE: YOUR TRUSTED PARTNER ON YOUR AI JOURNEY

SNOWFLAKE'S AI PRINCIPLES: EASY. EFFICIENT. TRUSTED.

At Snowflake, our customer-first philosophy permeates every aspect of how we design and deploy our technology — where complex systems are transformed into intuitive, powerful tools adapted to how people and businesses actually work. As tech pioneers, Snowflake understands that true innovation isn't just about features — it's about creating experiences and tech ecosystems that are efficient, secure and provide an optimal user experience. Think of this approach as a careful balance of simplicity without compromising the sophisticated nature of modern technology; it's about delivering technology crafted to be as straightforward as your favorite everyday app, while packing the flexibility to meet your tailored needs, such as enterprise-grade security and governance capabilities that today's organizations need.

By reimagining how users interact with the AI Data Cloud, Snowflake is breaking down traditional barriers between leading-edge capabilities and accessible experiences, turning complex data and AI solutions into streamlined workflows that just make sense. The result is that Snowflake's platform features don't just work well — they work the way your business needs them to, and they include security and governance capabilities you can count on and trust.

EASY.

1. Seamlessly access advanced LLMs tailored for telecom operators to improve efficiency and customer experience.
2. Reduce data movement by deploying LLMs directly with your telecom data estate, reducing latency and enhancing performance.
3. Use no-code or code tools to innovate across customer service, network management and marketing.

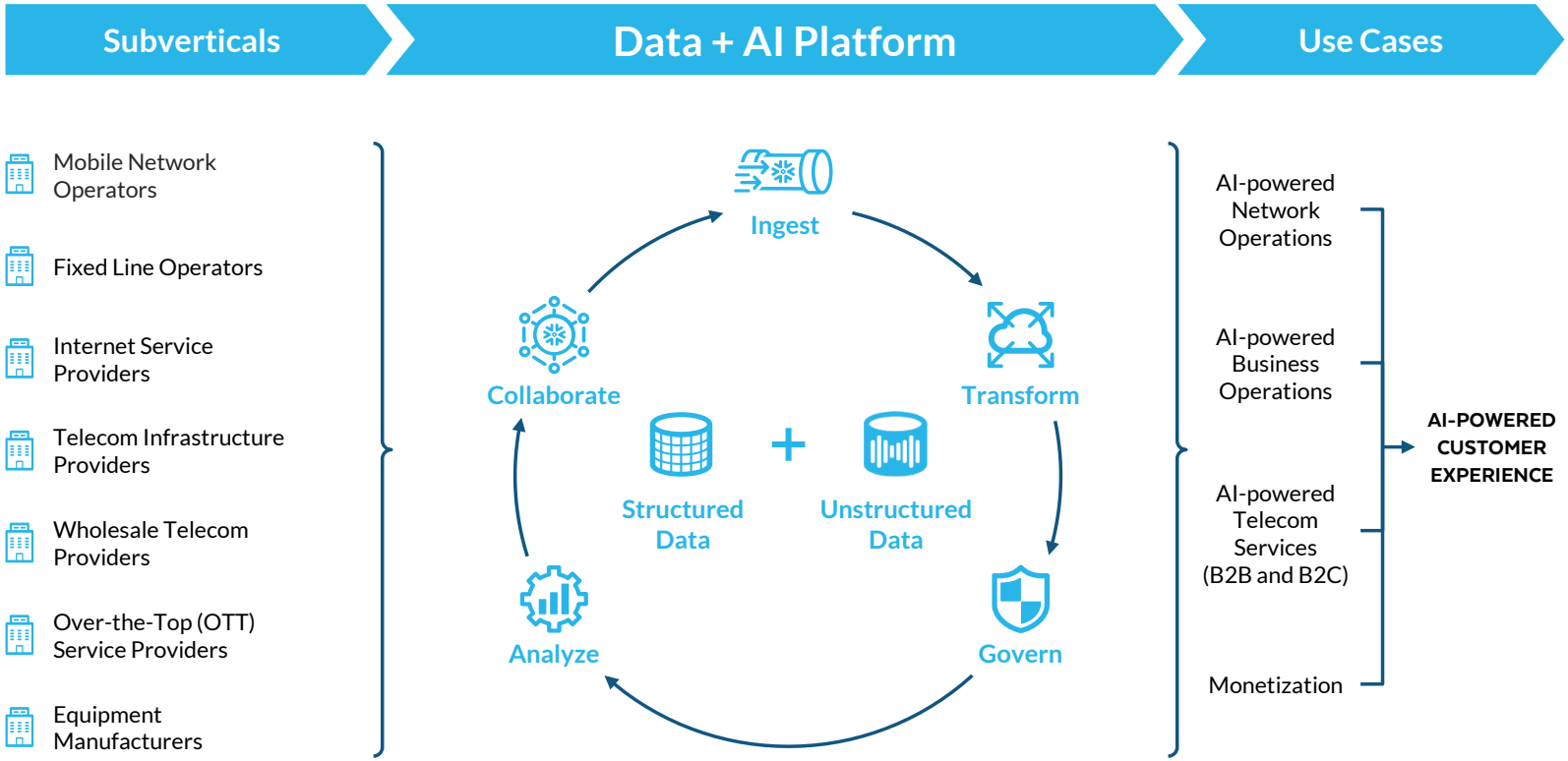
EFFICIENT.

1. Easily train models with advanced search for customer insights and network optimization.
2. Unify your data and AI platform to avoid new pipelines.
3. Optimize compute for cost-effective real-time insights on network and customer interactions.

TRUSTED.

1. Effortlessly enable unified security and governance for all telecom data and AI workflows.
2. Maintain data quality and transparency for customer insights and network planning.
3. Built-in guardrails help prevent bias and harmful content, promoting ethical AI use.

OVERVIEW OF AI DATA CLOUD FOR TELECOM AND CORTEX CAPABILITIES



AI DATA CLOUD FOR TELECOM

Service providers are searching for new innovative yet cost-effective ways to edge out their competitors and grow their revenue streams in a complex ecosystem that's rapidly evolving and uncertain, from the global economy to new government regulations. Today, industry leaders recognize the need for data-driven decision-making powered by a robust data and AI strategy. The AI Data Cloud for Telecom is at the center of their business strategy, empowering them to unlock value from their sensitive data and collaborate across the business and with partners in a secure, compliant and scalable way.

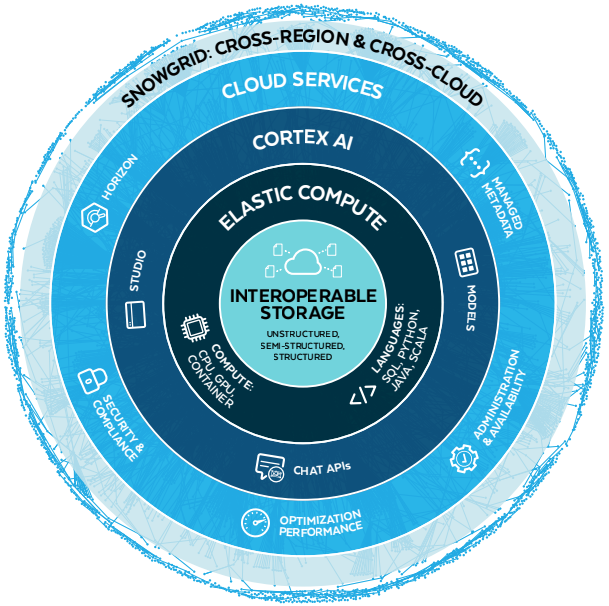
FORRESTER'S NEW ANALYSIS OF SNOWFLAKE

354%
Proven ROI

<6 MONTHS
Payback

$24.9M
Benefits Present Value

Learn more about Snowflake's proven results in Forrester's new
Total Economic Impact of the Snowflake AI Data Cloud report



IT JUST WORKS.

The AI Data Cloud is a single, fully managed platform that provides a collaborative application framework, ML and gen AI tools and interoperability telecoms need to move with agility and scalability while delivering optimal experiences for customers and optimal results for the business. Snowflake's powerful core **platform capabilities** provide telecom operators with a wide range of benefits.

- An easy-to-use, fully managed global platform
- Unified, built-in security, privacy and governance capabilities
- Easy-to-use and secure AI/gen AI
- *No hidden costs:* Transparent, consumption-based pricing
- Powerful data collaboration to discover, shareb and monetize data and apps
- Business-critical processes and tasks

POWERFUL GOVERNANCE: SNOWFLAKE HORIZON

Snowflake Horizon offers telecom operators a comprehensive governance framework that enables data security, compliance and trust across their organization. With capabilities like sensitive data classification, row- and column-level security, and robust access controls, operators can manage their data assets while adhering to stringent industry regulations. This unified approach empowers telecom leaders to unlock the value of their data, drive innovation, and confidently collaborate across teams and partners in a rapidly evolving landscape. Snowflake Horizon comes equipped with a unified set of capabilities, including:

Compliance: Protect and audit your data with business continuity, data quality monitoring and lineage.

Security: Secure your environment with continuous risk monitoring and protections, role-based access control (RBAC) and granular authorization policies.

Privacy: Unlock the value of your sensitive data with advanced privacy policies and data clean rooms.

Access: Classify, share, discover and take immediate action on data, apps and more across regions and clouds.

Interoperability: Integrate with other compatible catalogs and engines, and with data catalog and data governance partners.

SNOWFLAKE CORTEX AI

Built for the enterprise, **Cortex AI** enables a secure and seamless development of AI, generative AI and LLM applications, empowering telecom operators to engage with their data to drive innovation and deliver critical business solutions faster. By enabling real-time, data-driven insights, Cortex supports key telecom use cases such as optimizing network operations, enhancing customer experience, streamlining business processes, and monetizing telecom services.

Cortex powers business insights for key use cases, including:

- **AI-augmented business intelligence:** Deliver advanced insights on customer behavior, network performance and operational efficiency to inform strategic decisions and drive revenue growth.
- **Text processing and summarization:** Automate the processing of customer feedback, call center transcripts and regulatory documents to streamline operations and improve customer service.
- **Document chatbots:** Enable self-service customer support by creating AI-driven chatbots that provide real-time answers to billing, network and device troubleshooting queries.

CORTEX AI CAPABILITIES

Easy.
Fully managed, user-friendly and tightly integrated data and AI infrastructure. Accessible via no-code Studio, SQL, Python and REST APIs interfaces to reduce development costs and complexity.

Efficient.
Bring AI to your data. Streamline development-to-deployment lifecycle with cutting-edge AI models, frameworks and apps running next to the data to help achieve better quality and lower operational cost.

Trusted.
Protect the value of your IP at scale with industry-leading security and unified governance capabilities for data and models trusted by thousands of organizations.

INDUSTRY-LEADING MODELS

ANTHROP\C snowflake
Meta MISTRAL AI_ AI21labs

and more

CORTEX AI OVERVIEW

Deliver AI Solutions in Minutes

Build and deploy AI and LLM apps in as little as minutes. Deliver quick apps in minutes or go fully custom in days.

Robust Security and Governance Features

Robust foundation to **safeguard your data, models and IP** from unintended use with role-based access definitions on data, models and apps in Snowflake.

Analytics in Seconds

Use AI and LLMs in everyday analytics within seconds. No AI expertise or integrations needed.

CORTEX AI FEATURES

Built for fast enterprise AI, Cortex features a suite of capabilities for across the enterprise, from business users and customer service agents to CTOs and COOs.

AI and ML Studio

All levels of users can securely use AI with a built-in no-code development interface.

Cortex Fine-Tuning

Easily customize LLMs securely to increase the accuracy and performance of models for use-case-specific tasks.

Cortex Search

Quickly and securely find information in documents by asking questions in natural language.

Cortex Analyst

Empower business users to ask questions of data, allowing them to find insights and answers faster.

BUILT ON SNOWFLAKE CORTEX AI

Snowflake knows just how business-critical it is to optimize time-to-value. So Snowflake Cortex AI offers fully managed AI experiences inside **Snowsight**, the Snowflake web interface, including:

SNOWFLAKE COPILOT

Enterprises' AI-Powered Assistant:
Improve productivity with a breakthrough AI-powered assistant that refines queries or questions of the data through conversation.

DOCUMENT AI

Effortless Data Extraction:
Easily obtain data points from multiple PDFs and other documents using Arctic-TILT, a multimodal LLM developed by Snowflake.

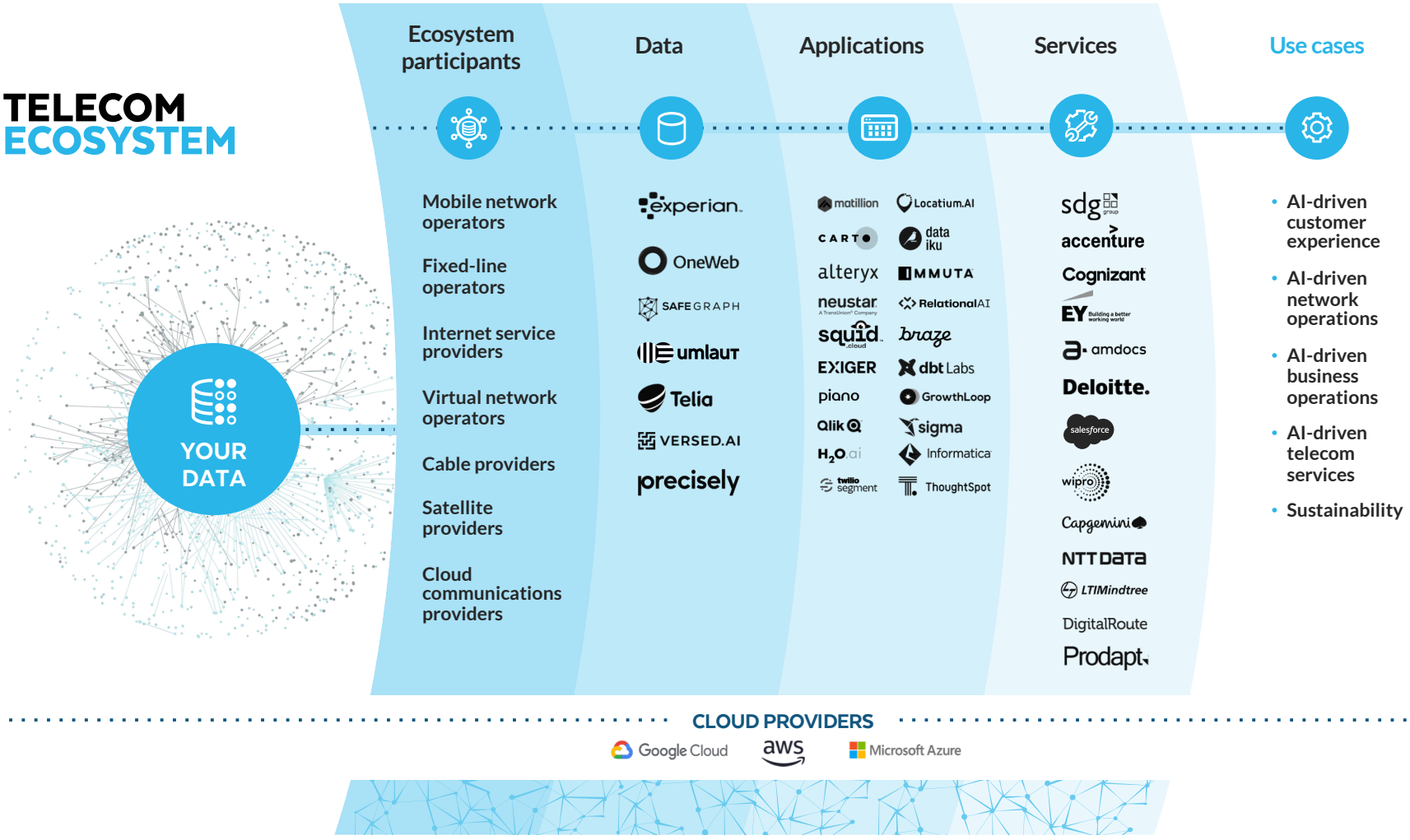
UNIVERSAL SEARCH

Powerful Search:
In just one search, find data and apps fast across both your Snowflake account and Snowflake Marketplace.

LEARN HOW CUSTOMERS ARE USING CORTEX NOW

Download the **Secrets of Gen AI Success** ebook now.

SNOWFLAKE'S TELECOM ECOSYSTEM



CHAPTER 4:

ESSENTIAL TELECOM ENTERPRISE AI USE CASES

AI-POWERED NETWORK OPTIMIZATION

Imagine transforming your network operations into a proactive, predictive force — where AI doesn't just prevent disruptions but also turns network data into a strategic advantage. With advanced AI and ML capabilities, telecom operators can anticipate issues before they affect customers, optimize resource allocation, and improve operational workflows. By combining network performance data with business insights, operators can enhance customer satisfaction, better allocate capital investments, and drive smarter, more efficient growth while maintaining the critical benefits of predictive maintenance.

USE CASE: CALL TRANSCRIPT ANALYSIS

Accelerate network resolution time:
Transform manual troubleshooting into AI-driven, automated solutions. By leveraging AI for transcript analysis, telecoms can identify and resolve network issues **65% faster than traditional methods**. This AI-enabled approach turns customer calls into actionable network insights, preventing recurring problems before they impact more customers.

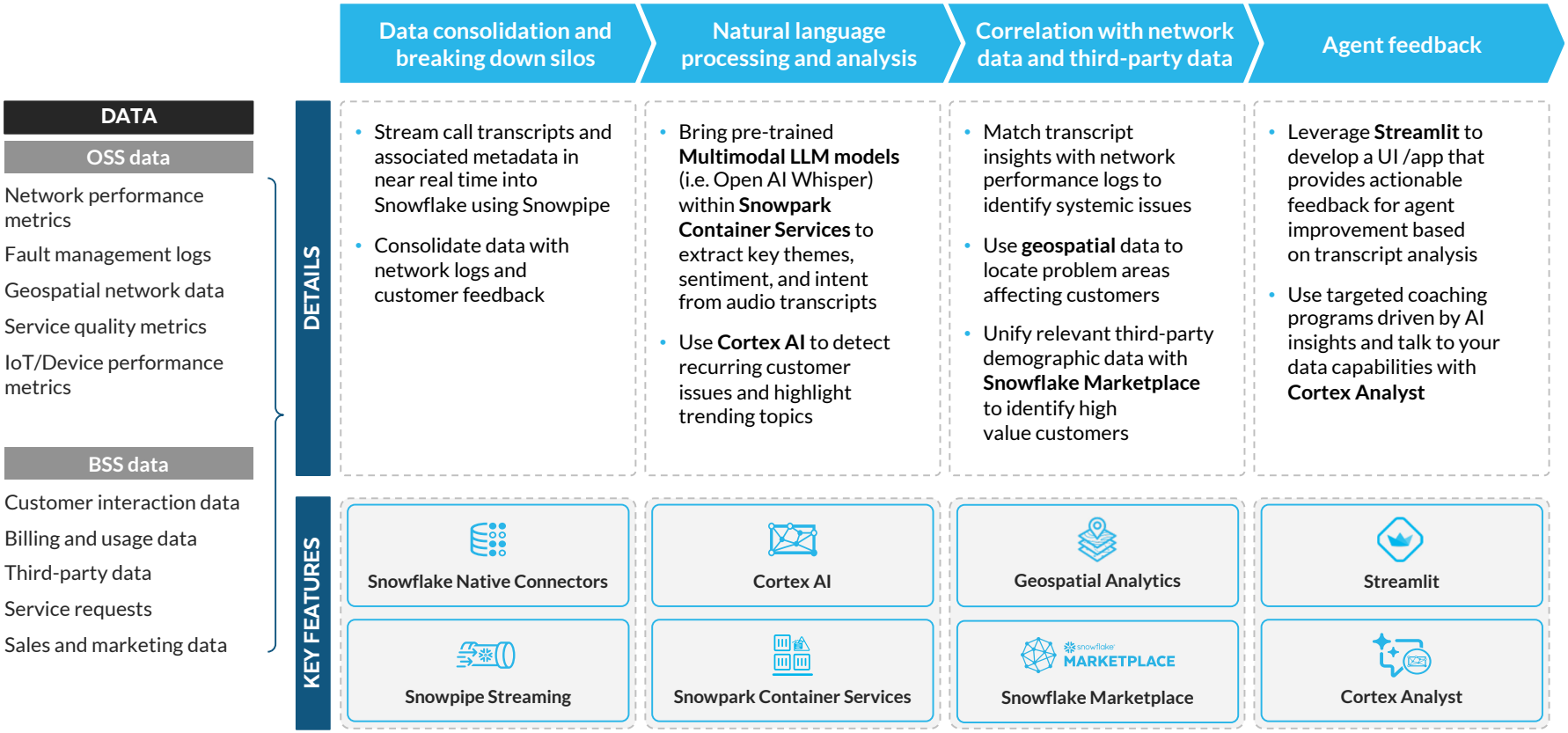
Improve customer experience:
Turn customer service interactions into actionable network insights. With AI-analyzed call transcripts, service providers can reduce network issue resolution time by **up to 65%** while improving first-call resolution rates. Telecoms can then identify systemic network issues in near real-time, turning customer feedback into proactive network improvements.

Enable real-time issue detection:
Convert massive call volumes into real-time network intelligence through AI analysis. By automating transcript processing with AI, telecoms can instantly spot emerging issues and patterns that human analysts might miss. The result is telecoms can help prevent service disruptions by catching problems early in its lifecycle.

Enhance network performance:
Transform scattered customer feedback into strategic network improvements using AI analytics. With AI-processed call transcripts correlated with network metrics, telecoms can pinpoint performance issues with precision and deploy targeted fixes, and predict and prevent network problems before they affect customer satisfaction.

CALL TRANSCRIPT ANALYSIS FOR NETWORK OPTIMIZATION

How it works



USE CASE: NETWORK DEPLOYMENT AND PLANNING (SMART CAPEX)

Increase CapEx ROI:
With the telecom industry spending **$300 billion annually** on network CapEx, AI-driven planning can **increase ROI by up to 25%**. Smart deployment identifies high-impact areas for investment, prioritizes resources based on customer demand, and predicts return on investment before breaking ground.

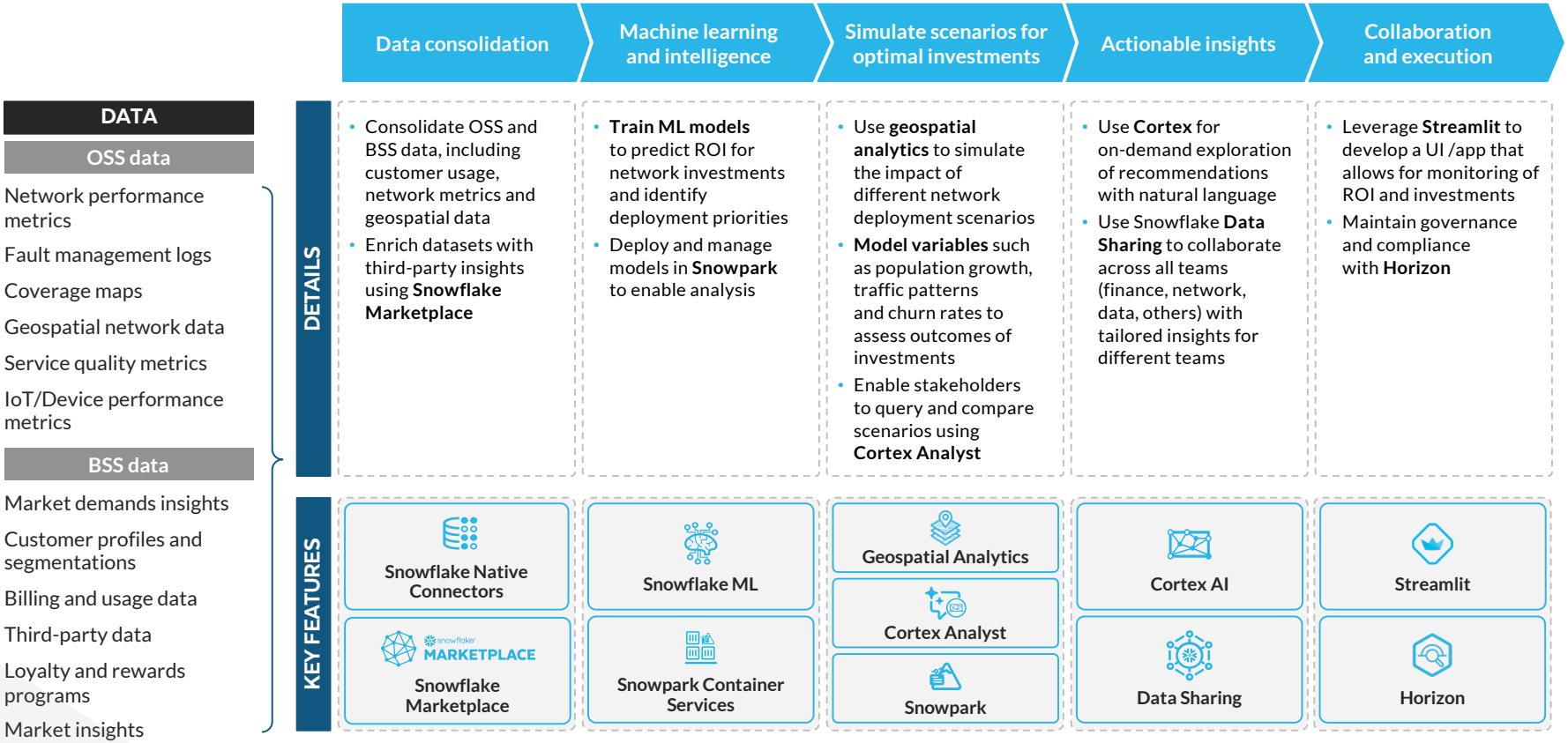
Proactive maintenance:
Convert reactive maintenance into predictive network care using AI insights. With AI-analyzed network performance data, telecoms can prioritize critical assets and reduce downtime before issues impact service, preventing service disruptions through early intervention.

Predict network investment ROI:
Implement ML models that predict ROI for network investments by analyzing consolidated OSS and BSS data, including customer usage patterns, network metrics and geospatial information. Leverage geospatial analytics to simulate different deployment scenarios and model variables such as population growth and traffic patterns to assess investment outcomes.

Faster planning cycles:
Transform lengthy manual planning cycles into rapid decision-making processes. By automating scenario simulations with AI, service operators can evaluate multiple deployment options simultaneously. This approach accelerates network planning while improving accuracy and reducing resource requirements.

NETWORK DEPLOYMENT AND PLANNING (SMART CAPEX)

How it works



AI-POWERED BUSINESS OPERATIONS

Modernize your business operations into an intelligent ecosystem that not only optimizes revenue but also creates hyper-personalized customer experiences and detects fraud. By leveraging AI-driven insights, telecommunications providers can revolutionize how they protect revenue streams and engage with customers, turning data into actionable intelligence that drives growth and customer loyalty.

USE CASE: REVENUE ASSURANCE

Reduce revenue loss:
With global telecom revenue leakage estimated at **$50 billion annually**, AI-powered solutions can significantly reduce revenue loss through advanced anomaly detection and automation. The solution can help ensure billing accuracy, protect customer trust, and enable compliance with regulatory requirements while reducing the cost of fraud detection systems.

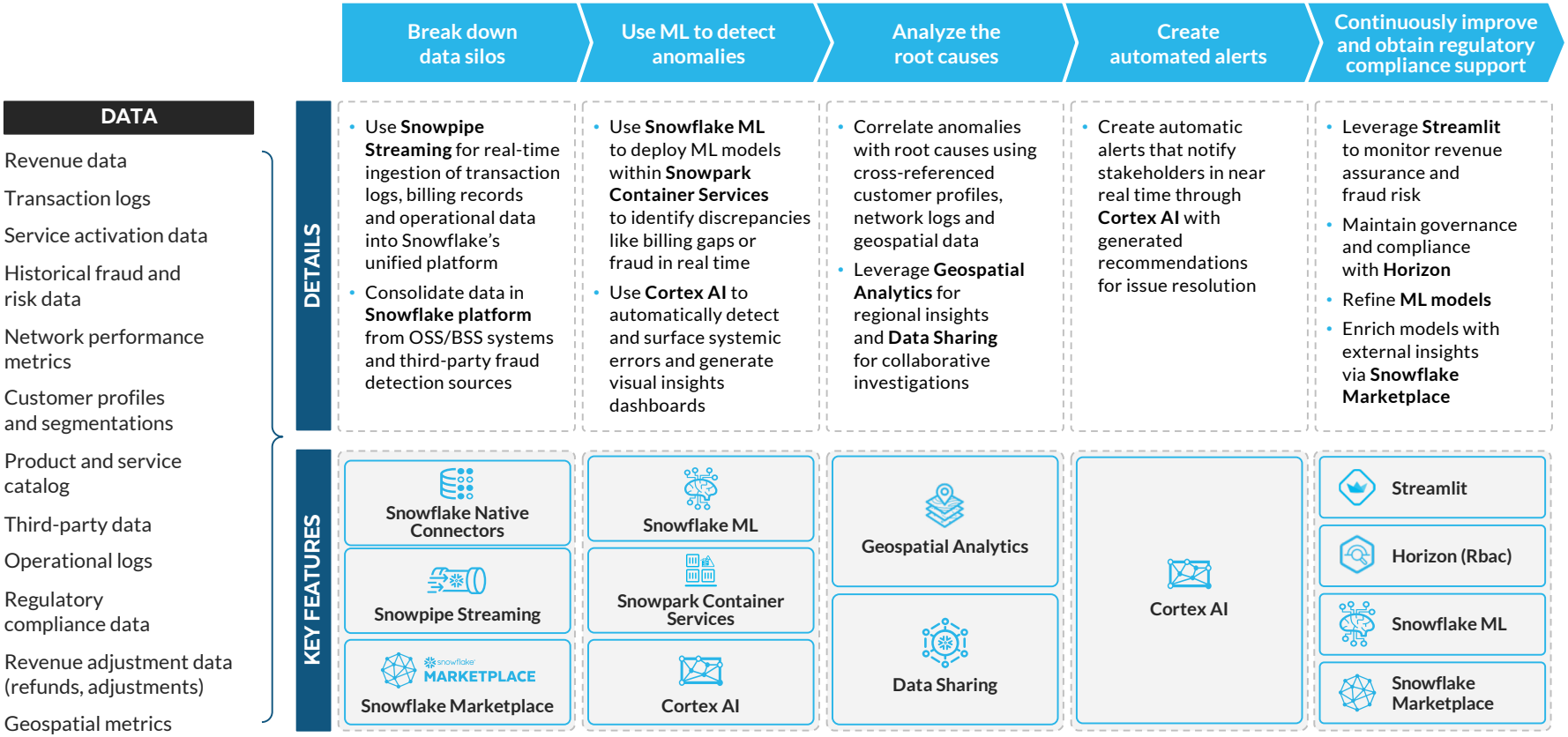
Enable fraud prevention:
Deploy ML models within secure container services to identify discrepancies and fraud in real time. The solution consolidates data from OSS/BSS systems and third-party fraud detection sources, enabling automated alerts and root cause analysis through cross-referenced customer profiles, network logs and geospatial data.

Enhance compliance processes:
Transform regulatory compliance processes into automated workflows through AI monitoring. By continuously analyzing financial processes, telecoms can help ensure adherence to standards while reducing manual oversight. Compliance is maintained while reducing the resource burden of regulatory requirements.

Power cost savings:
Turn operational expenses into efficiency gains using AI automation. By streamlining reconciliation processes, service providers can reduce fraud detection system costs substantially. This AI-powered approach offers both immediate cost savings and long-term operational benefits.

REVENUE ASSURANCE

How it works



MARKETING AI DECISIONING

Increase campaign ROI:
Transform marketing investments into measurable returns through AI optimization. By leveraging AI for targeting and timing decisions, service providers can **improve marketing ROI by up to 30%** and capture the **80% of customers who prefer personalized offers**.

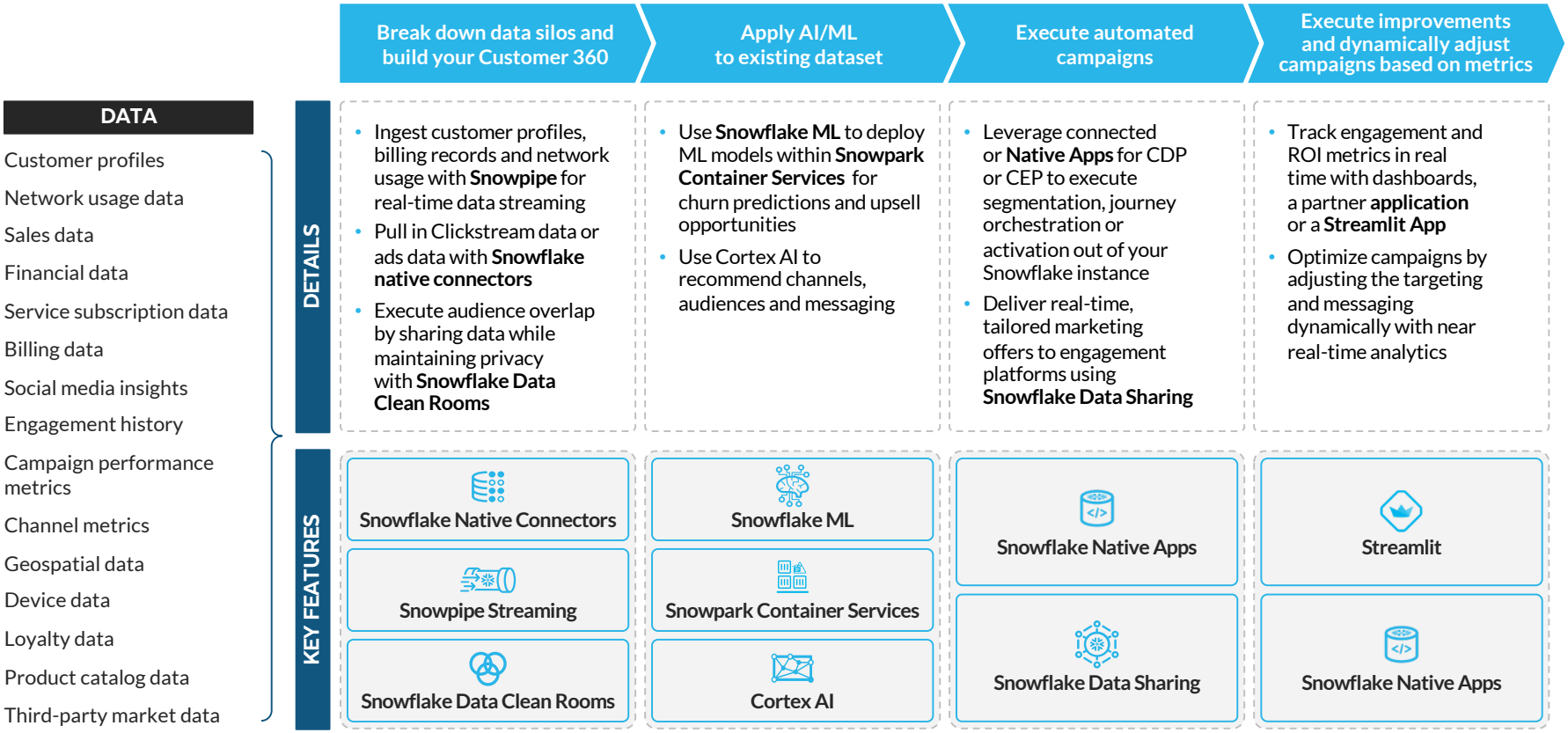
Improve customer engagement:
Convert generic outreach into hyper-personalized experiences. With AI decisioning in marketing, telecoms can significantly increase customer engagement and **boost revenue by 5-15%** through delivering personalized interactions that drive customer loyalty.

Drive cost efficiencies:
Turn resource-intensive campaign management into streamlined operations. With AI-driven campaign planning and execution automation, telecoms can significantly reduce manual effort and operational costs, allowing them to **reduce customer acquisition costs by up to 50%** and optimize resource allocation while improving campaign effectiveness.

Better marketing intelligence:
Take fragmented data and turn it into actionable insights. With AI-unified marketing data analysis, service providers can make data-driven decisions across all initiatives, leveraging their unique data assets for strategic advantage.

MARKETING AI DECISIONING

How it works



AI-POWERED TELECOM SERVICES

The next evolution in telecom services has arrived — dynamic, intelligent solutions that create new revenue streams while delivering unprecedented value to enterprise customers. By leveraging AI and advanced data capabilities, telecommunications providers can expand beyond traditional connectivity services, offering innovative solutions that address complex business challenges and unlock new market opportunities.

USE CASE: DIGITAL TWIN FOR PRIVATE 5G

Immediate network load balancing:
Enable effortless network management with natural language controls, allowing AI business users to optimize capacity in real time. This enables telecoms to make complex network adjustments as simple as having a conversation.

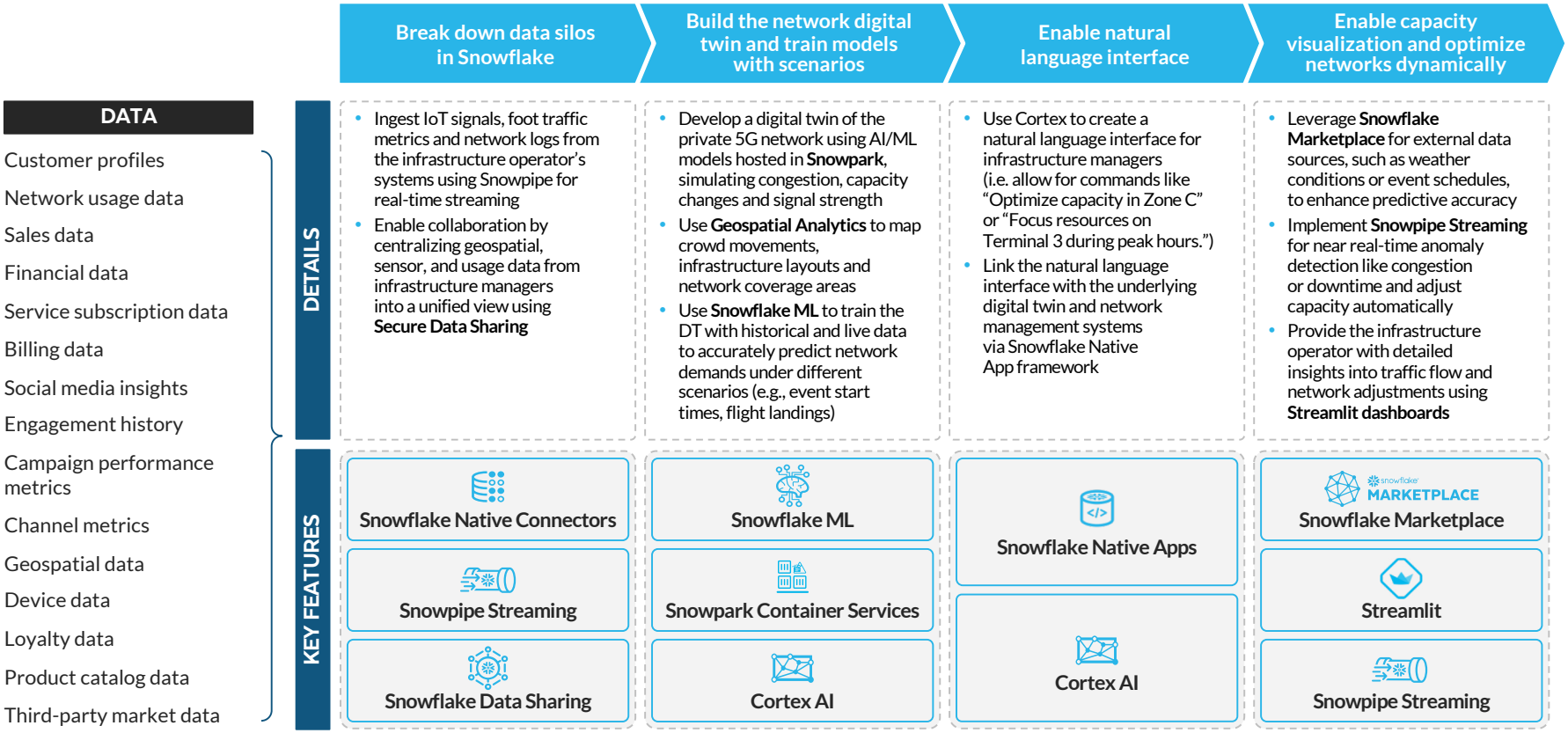
Optimized network utilization:
Convert static resource allocation into dynamic efficiency. By leveraging AI-driven digital twins, telecoms can maximize network utilization through intelligent adjustments, ensuring resources are always aligned with actual demand.

Reduce downtime:
Shift reactive maintenance into predictive network protection. With AI-driven digital twins, service providers can substantially reduce network downtime through preventive interventions, stopping disruptions before they impact service delivery.

Cost optimization:
Convert operational expenses into strategic savings. By implementing dynamic AI adjustments, telecoms can reduce operational costs while reducing waste, optimizing return from network investments.

DIGITAL TWIN FOR PRIVATE 5G

How it works



TELECOM MEDIA

New revenue streams:
Convert traditional telecom services into a dynamic media business. By leveraging AI and data clean rooms, they can achieve **profitability margins exceeding 50%** in a market projected to reach **$140 billion by 2026** and create new value from existing customer relationships.

Increase transparency:
With AI and data clean rooms, telecoms can build advertiser relationships through measurable results. By providing privacy-preserving, impactful solutions, service providers can build deeper trust with both customers and advertisers.

Enhance compliance processes:
Elevate privacy challenges into competitive advantages. With secure data clean rooms and AI, telecoms can monetize customer data while maintaining strict GDPR and CCPA compliance. This privacy-first approach builds trust while enabling new revenue opportunities.

Improve ad performance:
Unlock advertising effectiveness through first-party data and AI intelligence. With AI-driven customer insights, telecoms can improve ad performance as compared to using third-party cookies and deliver superior results for advertisers.

CUSTOMER SPOTLIGHT

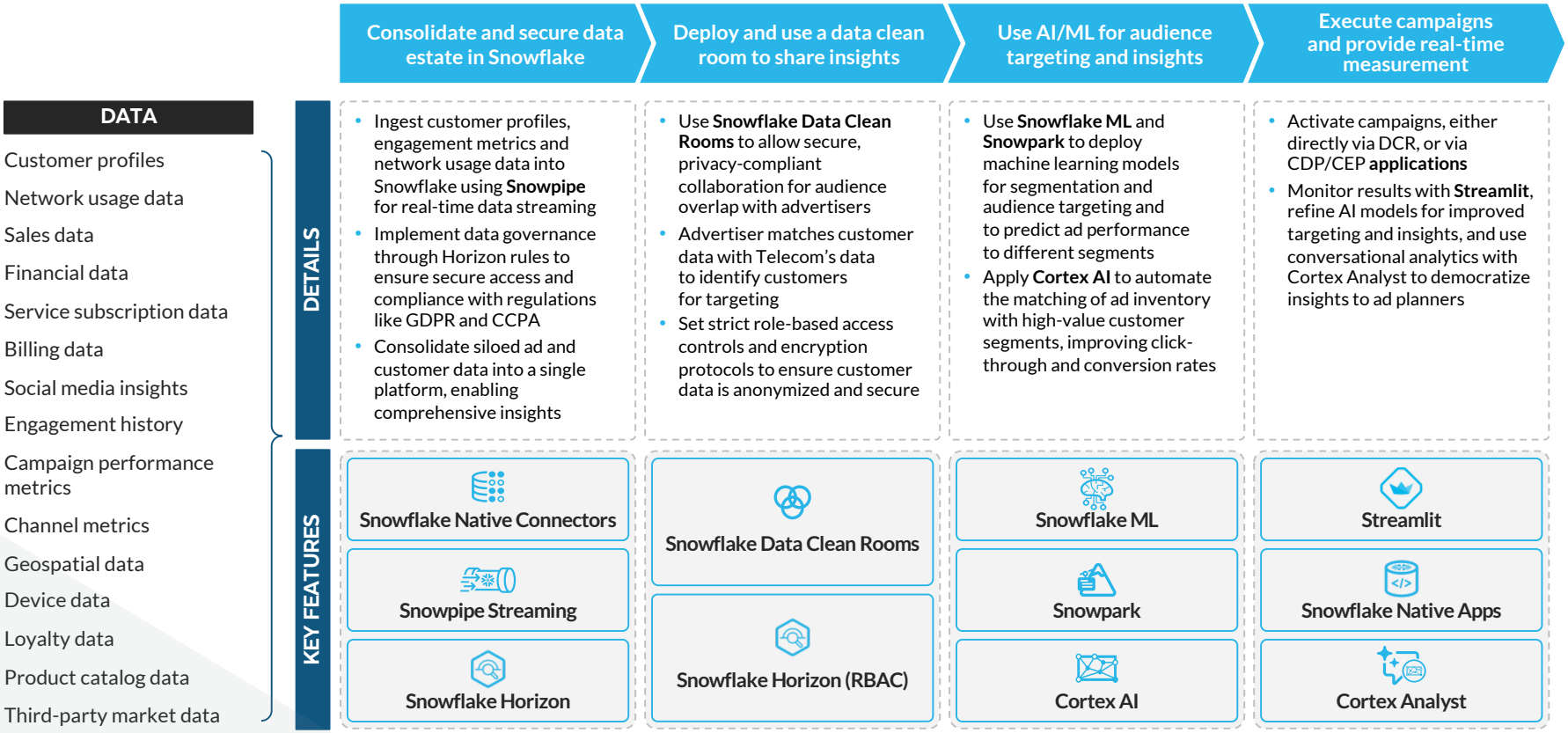
HEADQUARTERS
Bellevue, Washington

INDUSTRY
Wireless Network Operator

T-Mobile is the fastest-growing wireless carrier in the United States, serving over 115 million customers. Snowflake's Telecom Data Cloud platform enabled T-Mobile to power one of its new business divisions: T-Mobile Advertising Solutions (a.k.a. T-Ads). With the support of Snowflake, T-Ads is empowering brand marketers to build customized audience personas for targeted advertising and, to date, have created over 400 ready-to-use personas for behavioral targeting. T-Ads' customers can also source and layer on third-party data from over 40 providers in its own marketplace, the Magenta Advertising Platform. Snowflake has not only helped T-Mobile improve its return on ad spend (ROAS) by leveraging T-Ads' audience targeting capabilities, but it has also been essential to T-Mobile improving operational efficiency, increasing profitability for new products and services, and accelerating time-to-market on other data and machine learning projects.

TELECOM MEDIA (MARTECH/ADTECH)

How it works



AI-POWERED CUSTOMER EXPERIENCE

Every customer interaction can be an opportunity for deeper engagement and enhanced satisfaction with AI. —where AI doesn't just respond to customer needs but anticipates them. By leveraging advanced AI capabilities, telecom providers can revolutionize how they support and engage with customers, creating seamless, personalized experiences that build loyalty while reducing operational costs.

USE CASE: SELF-SERVICE DOCUMENTATION

Drive cost savings:
Reduce operational expenses through AI-powered self-service. By limiting contact center reliance, telecoms can decrease costs while meeting the needs of the **57% of customers** who prefer to engage through digital channels. This automation-driven approach can optimize resource allocation.

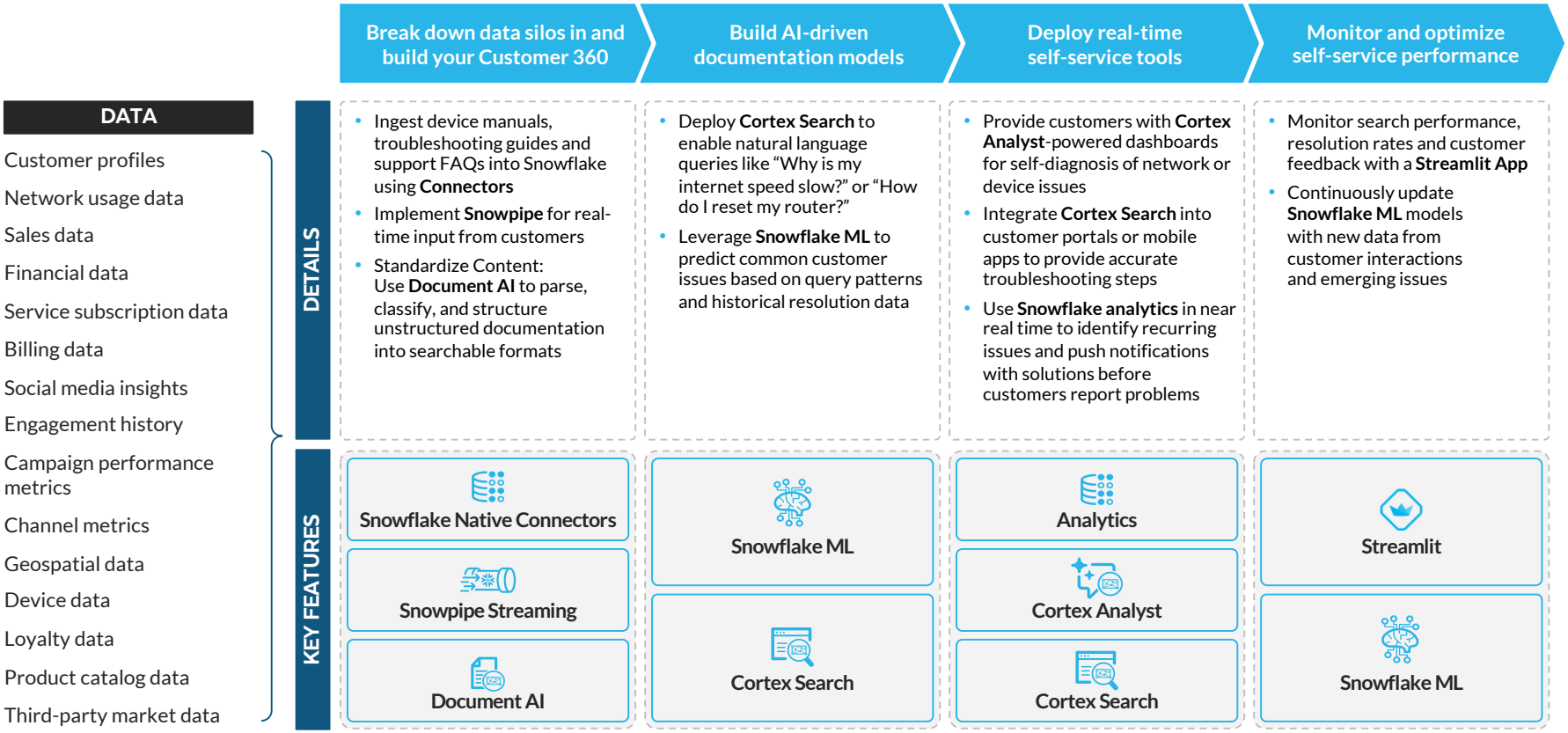
Increased customer satisfaction:
Boost customer loyalty through AI-driven personalized self-service experiences. By providing relevant solutions, telecoms can reduce churn rates annually as the result of strengthened customer relationships and the building of long-term trust.

Faster resolutions:
Accelerate customer support response times through AI assistance. With intelligent documentation systems, service providers can notably improve resolution speeds by generating immediate answers to customer queries.

Efficiency gains: Optimize agent productivity through AI-automated task handling. With routine inquiries redirected to self-service channels, service providers can free agents to focus on complex, high-value interactions. This strategic approach can optimize the impact of their support team.

SELF-SERVICE DOCUMENTATION

How it works



USE CASE: CONTACT CENTER NEXT BEST ACTION

Improved customer retention:
Elevate customer satisfaction through personalized interactions. By implementing AI-driven recommendations, telecoms can reduce churn and prevent the **60% of customers** who switch brands after poor experiences. Not to mention build lasting customer relationships.

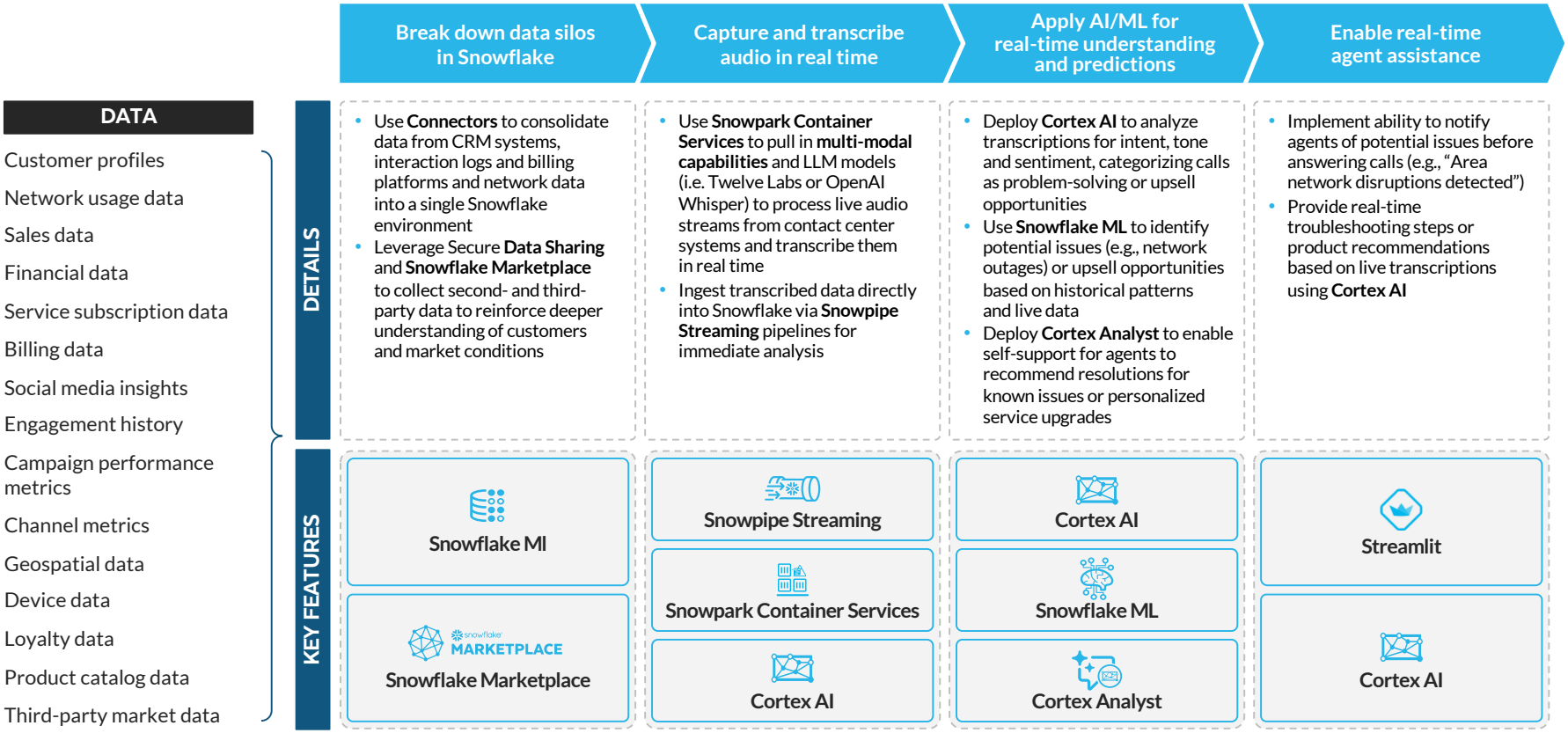
Faster resolution times:
Accelerate customer issue resolution through real-time AI assistance. By providing agents with immediate recommendations, telecoms can significantly reduce handling times and improve both efficiency and customer satisfaction.

Increased revenue:
Unlock new revenue streams through intelligent opportunity detection. WIth AI-powered next best actions, service providers can increase upsell and cross-sell opportunities, optimizing revenue per customer interaction.

Agent productivity:
Enhance agent performance through intelligent decision support. With AI-powered workflow tools, telecoms can empower agents to handle complex cases more effectively, reducing their stress while increasing productivity.

CONTACT CENTER NEXT BEST ACTION / EXPERIENCE

How it works



CHAPTER 5:

LEARN MORE ABOUT SNOWFLAKE

Leading telecom companies are gaining powerful data-driven insights, AI solutions, analytical capabilities and the collaborative tools they need to outsmart their competitors in a complex market and tech ecosystem with the AI Data Cloud for Telecom and Cortex AI. With Snowflake, telecoms can focus on delighting customers, identifying new business opportunities and driving sustainability efforts while maintaining strict levels of data security, privacy, compliance and governance.

To learn how your organization can unlock the power of data and AI, visit **Snowflake AI Data Cloud for Telecom**.

SNOWFLAKE TELECOM CUSTOMERS

AT&T

COX

Globe

Spark nz

View all customer stories

ABOUT SNOWFLAKE

Snowflake makes enterprise AI easy, efficient and trusted. Thousands of companies around the globe, including hundreds of the world's largest, use Snowflake's AI Data Cloud to share data, build applications, and power their business with AI. The era of enterprise AI is here.

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