

AI Solutions Powered by CoreCONNECT

[McKinsey recently estimated](#) that AI, including GenAI, traditional machine learning, and deep learning models, can contribute \$1.1 trillion in economic value to the global insurance industry. For individual insurers, this translates into new economic value equal to almost 25% of revenue. Despite this potential, many life and annuity insurers are struggling to fully realize the benefits of AI. When building AI solutions into their digital experiences (DXPs) and workspaces, insurers face three main challenges:

Data to Train and Deploy AI Models

Securing access to data, structured and unstructured, from legacy back-end systems and transforming it into usable formats for AI models. Including both initial training data and ongoing production-level data flows.

Back-End Workflows for AI Models

Orchestrating workflows to complete AI-triggered events and transactions across diverse collections of back-end core systems.

AI Security and Compliance

Maintaining histories of training and transaction data to validate safe and compliant AI use within a rapidly changing regulatory landscape. We believe these challenges can be addressed via one complete solution. Sureify's [CoreCONNECT Platform](#) provides comprehensive API access to producer and policyholder data by collecting and unifying information from backend

systems. This transformed data supports the training and deployment of AI models as well as the digital experiences that use those models. CoreCONNECT's flexibility and scalability ensures that today's solutions can also adapt to tomorrow's challenges. This paper explains how.



AI DIGITAL EXPERIENCE USE CASES

AI, in the form of traditional machine learning (ML) and large language models (LLMs), can be used almost anywhere to organize and present complex information, automate new types of tasks, and support decisions or recommendations.

In the early days of the Internet people would ask, “What are the use cases for the Internet?” This now seems like a silly question. But five years from now, we will say the same about naming “AI use cases.” The technology will be so ubiquitous that it will be like asking about the use cases for computers. Today, AI excels at data analysis, pattern recognition, task automation, and personalization. Here is just a tiny sampling of use cases:

Personalization and Recommendation Engines

One of the most common uses of machine learning is the ability to interpret situations and make recommendations. One example: recognizing that a policyowner has young children in the household and presenting information on a new children’s rider or other content upon login to the service portal to check a fund balance. Training machine learning models to provide this type of support involves transforming data points (e.g., a child’s date of birth and residence data from beneficiary options) into features such as the number of young children at home. It also involves creating and relaying new product features and website content to drive those recommendations.

Underwriting Decision Models

Transforming multiple streams of structured and unstructured health and personal data into summaries and risk scores can facilitate either making an instant underwriting decision or supporting an underwriter in making a decision. The power of these models is that they can learn continuously based on experience in terms of both claims and other adverse outcomes such as lapse history.

Agent/Advisor Notifications

Having insight into specific customer behaviors can better equip agents to retain and grow customer relationships. For example, when a customer logs in to check an index-based life policy the day after a significant drop in the stock market, it might be a good time for the agent to reach out. ML models can help detect such patterns and trigger automatic alerts to be sent to agents.

Agent/Advisor Chatbots/Virtual Assistants

An LLM trained in agent onboarding can guide new agents and home office staff through appointment and contracting processes. Trained chatbots can help answer agent questions about new contracts, how commission calculations work on complex products, and where to find marketing information.

Prospective Customer Chatbots/Virtual Assistants

Trained chatbots can help answer both general and complex questions about specific products and rider combinations while including references to source documents to minimize accuracy problems. Agents can use these specialized chatbots to understand how product features align with prospects’ unique insurance needs. An LLM can be trained to seamlessly incorporate agents/advisors into customer chats, bridging the gap between AI-delivered product information and licensed agent advice.

Customer Service Chatbots/Virtual Assistants

Chatbots can answer customer policy and rider questions with coverage suggestions and policy management reminders (e.g., confirming beneficiaries) woven in. Hosting these conversations via a customer portal helps to reduce call center volume, and transform call center screenings into more pleasant and productive experiences, better aligned to call center rep skills.

Executive Operational Chatbots/Virtual Assistants

Multiple layers of operational and system complexity can make it difficult for executives to understand their organizations’ inner workings and detailed cost dynamics. Furthermore, missing and inconsistent data make it challenging to confidently rely on traditional dashboards. By creating a secure large language model (LLM) trained on operational data, traditional dashboards can be transformed into chatbots capable of providing executives with complete, accurate views of their organizations with citations to supporting documentation.

Code Co-Pilots/Programming & Complex Analysis

Whether it’s writing new code, building a complex spreadsheet, or just working to understand the operation of a complex process, LLMs can help to translate human language (what you need) into machine languages. This can also have profound implications for new application development and working with legacy systems. It enables business analysts to ask systems how they work directly.

OVERCOMING LEGACY SYSTEM AI DATA CHALLENGES

Life and annuity insurers often face complex data challenges when planning to create and deploy ML and LLM-powered solutions. Securing access to structured and unstructured data from legacy back-end systems and transforming it into usable formats for AI models can be a big obstacle to creating production-grade AI solutions. This challenge begins with initial training

data and continues with the need for ongoing production-level data flows to maintain data in back-end systems, inform workflows, and continuously train models.

Here's how CoreCONNECT supports carriers and their distributors in overcoming these challenges:

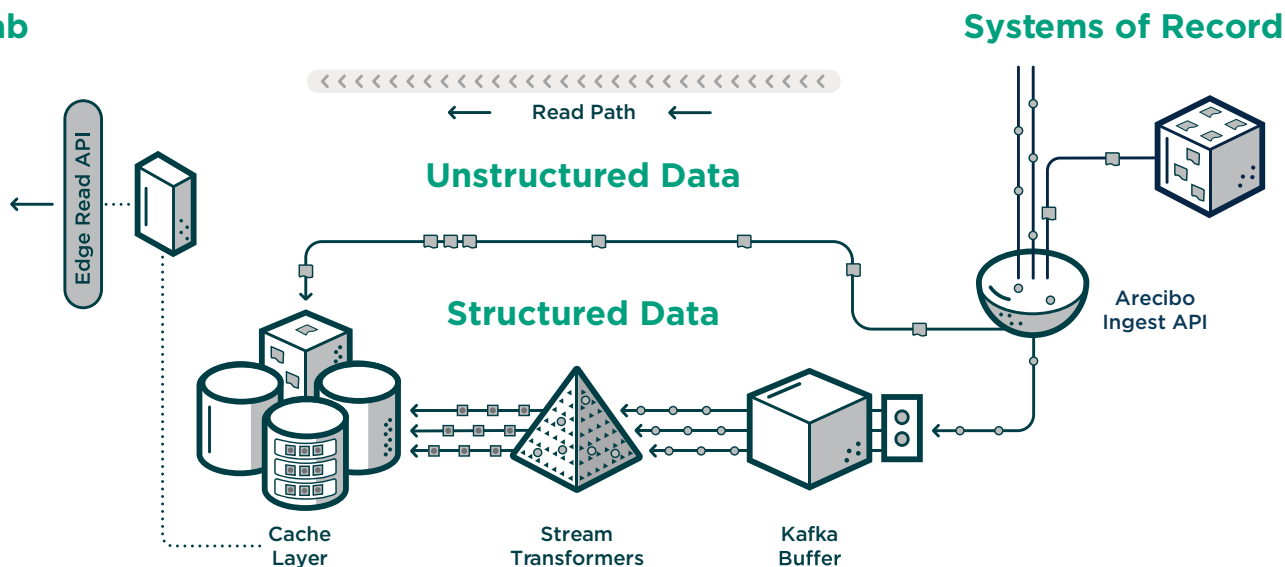
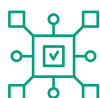
CORECONNECT'S AI DATA SOLUTION

Your AI Lab

Traditional ML Models



Large Language Models



1

Establishes Multi-System Data Connections

CoreCONNECT is designed to transform siloed and fragmented data from multiple legacy systems into a single logical set of entities surfaced via contemporary REST APIs. This is a critical first step in ensuring that AI models have an ongoing source of timely data from legacy systems. Once these connections are in place, the vast capabilities offered by AI Development Environments and the fast growing ecosystem of AI products and services can be leveraged.

2

Achieves Common Data Formats

Data quality is one of the biggest challenges for AI. With data coming from multiple systems, data formats and types often vary. CoreCONNECT's Arecibo Ingest API receives both structured and unstructured data at any time and at any level of granularity, reducing the work involved in moving large streams of data. Our high-performance Kafka Buffer enables our Stream Transformers to process these continuous data streams in sequential and fault-tolerant flows.

3

Makes Unstructured Data Usable

Unstructured data includes documents stored across enterprise and document management system(s), as well as other unstructured data such as call center recordings and email histories. A recent [IDC Study](#) noted that 90% of business data is unstructured. CoreCONNECT transforms this data into a rich training set for generating custom insights. This provides integrated support for the transmission, transformation, and secure storage of all data types.

4

Enables Real-Time Data Transformation

Organizations relying on their existing infrastructure to support new AI projects are finding that their existing data warehouse or data lake structures weren't designed to support the demands of today's digital experiences. Many were built to support analytics and bulk data transmission requirements, not real-time systems that must scale to deliver seamless performance during peak demand conditions. CoreCONNECT ensures that data received from core systems is transformed continuously so that edge data structures are up-to-date and scalable to deliver world-class digital experiences to agents/advisors, customers, prospects, and employees.

5

Creates and Manages Data Features

While bringing data together in one place is a critical first step, it's just the beginning. ML models often also require data to be transformed into new features. For example, while the details of a customer's missing premium payment may be available in transaction history files, an AI model may also require the "Number of Late Payments in Last 12 Months" (aka a feature). CoreCONNECT continuously transforms source data into new features and stores them in what AI calls a "Feature Store." Beyond the transformation of data into new features, CoreCONNECT integrates with powerful AI Development Environments to support the ongoing versioning and management of such features.

6

Supports Compliant Integration with AI Development Environments

Even when integrating with vendor models, capturing the historical record of training and transaction data remains essential. Regulators hold insurers responsible for supervising and managing their uses of AI. CoreCONNECT provides compliance-ready data and workflow support for world-class AI development environments like Amazon SageMaker, Amazon Bedrock (managed GenAI), Salesforce Einstein, and Microsoft Azure AI.



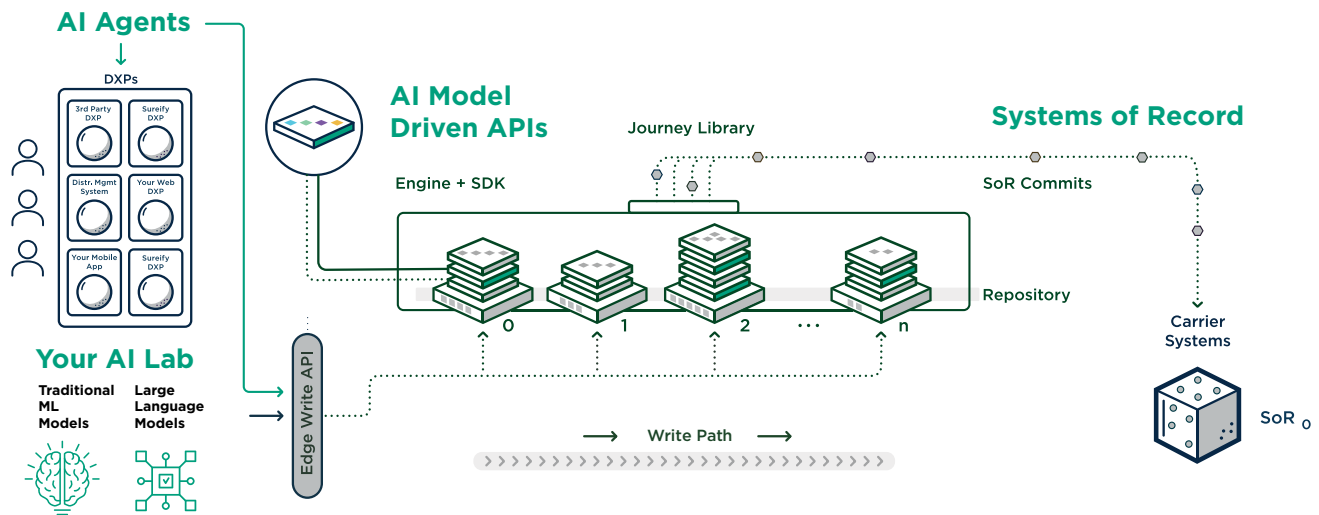
CREATING WORKFLOWS TO ACT ON AGENTIC AND AI MODEL-DRIVEN TASKS

Not to be confused with an insurance agent, AI has prompted an “agentic” or “intelligent agent” revolution. As we’ve worked with AI models like OpenAI’s ChatGPT and Meta’s open-source LLaMA, we’ve discovered that the models themselves are capable of a whole lot more than chat. This has driven an explosion of new AI agent capabilities from companies like Microsoft with CoPilot Studio and AutoGen as well as Salesforce with their Agentforce Platform. With the maturity of ML and the rise of generative AI, almost any customer experience can benefit from the use of AI models to answer questions, help make decisions, eliminate manual tasks, personalize service journeys, and manage process steps.

To effectively apply this to life insurance, a solution is needed to help direct workflows across the diverse collection of back-end core systems. CoreCONNECT fulfills this need by creating “Journeys” that orchestrate actions flowing from digital experiences. In response to sales and service transactions from agents, customers, and others, CoreCONNECT directs the necessary back-end system updates. These can be simple transactions (e.g., an address change) or based on AI model inferences or automated task selection. As Microsoft CEO Satya Nadella recently observed, “Every app is becoming an AI app” (Microsoft Ignite, November 19, 2024).

Here’s how CoreCONNECT incorporates AI Model-Driven Tasks into traditional workflows:

CORECONNECT’S AI WORKFLOW SOLUTION



1 Backed by a Powerful Workflow Engine

AI models can help build friendlier, more intuitive experiences, but they are only as good as workflow execution. Delivering world-class digital experiences includes navigating a collection of (often old) legacy systems of record. CoreCONNECT is built on top of the Temporal workflow engine to address this challenge. Temporal grew out of a workflow solution that managed Uber’s global orchestration challenges. CoreCONNECT’s Temporal workflow engine ensures that workflows are executed in a fault-tolerant and reliable manner. Because Temporal manages workflow state

while supporting asynchronous process steps, a machine learning model or models can be added into a process without worrying about all of the overhead developers often have to plan for related to scalability, API call retries, and timeout handling.

2 Built to Support Personalization

Imagine weaving agent/advisor interactions into routine transactions such as a customer checking a fund balance based on a consolidated view of their overall relationship. While AI models can be used to trigger such customized experiences based on data, this doesn’t

work unless there is a workflow orchestration engine. CoreCONNECT orchestrates these personalized experiences through to completion.

3

Triggers AI Model-Driven Workflows

Instead of triggering an action from a user interface, an agentic AI model can also be triggered directly by a CoreCONNECT journey - specifically, a journey from a model monitoring a given process. For example, a portal action, such as clicking but not completing a change of beneficiary, can trigger chat support. In other cases, CoreCONNECT can be used to build models into an existing process. For example, adding a “Sales Opportunity Notifications” model can trigger and distribute sales leads to a CRM based on customer transaction behaviors.

BUILDING AI SECURITY & COMPLIANCE

With the implementation of AI also comes security and compliance challenges. To remain compliant, insurers must ensure customer and organizational information privacy while making sure training data histories are maintained with logs for AI decision and workflow history data tied to those model versions. A great deal of discussion around compliance is focused on “decisions” made by AI models as in underwriting for example. But the vast majority of the work that AI is poised to automate involves tasks that support human decision makers.

CoreCONNECT builds security and compliance into its overall architecture for authentication, encryption, and archival data histories. Companies are stressing existing systems beyond their capabilities by trying to build AI pilots on top of infrastructures designed for a different computing era. CoreCONNECT ensures that AI models are built on a solid foundation, enabling insurers to safely scale AI proofs-of-concept into production-grade solutions.

Here’s how CoreCONNECT supports security and compliance requirements within a rapidly changing regulatory landscape:

Integrates with Identity Providers (IDP)

CoreCONNECT integrates with identity provider(s) for both access control security and security group enforcement. This allows for the handling of cases that require multiple levels of permissions to access different functions, such as model training, quality assurance, and the monitoring of models in production.

Tracks Data History

CoreCONNECT proactively addresses the preservation of model training and workflow connection data history (e.g., model version used). Detailed record-keeping establishes a transparent and auditable trail, enabling the investigation of issues or biases emerging within models. CoreCONNECT helps teams comply with current and emerging state and federal regulations (e.g., [NAIC Model Bulletin: Use of Artificial Intelligence Systems by Insurers](#) [December 4, 2023]).

A key guiding principle of new regulations, including the NAIC AI Model, is to stress that insurers are responsible for complying with all federal and state laws and regulations around decisions made or actions taken by AI models used by them in their operations.

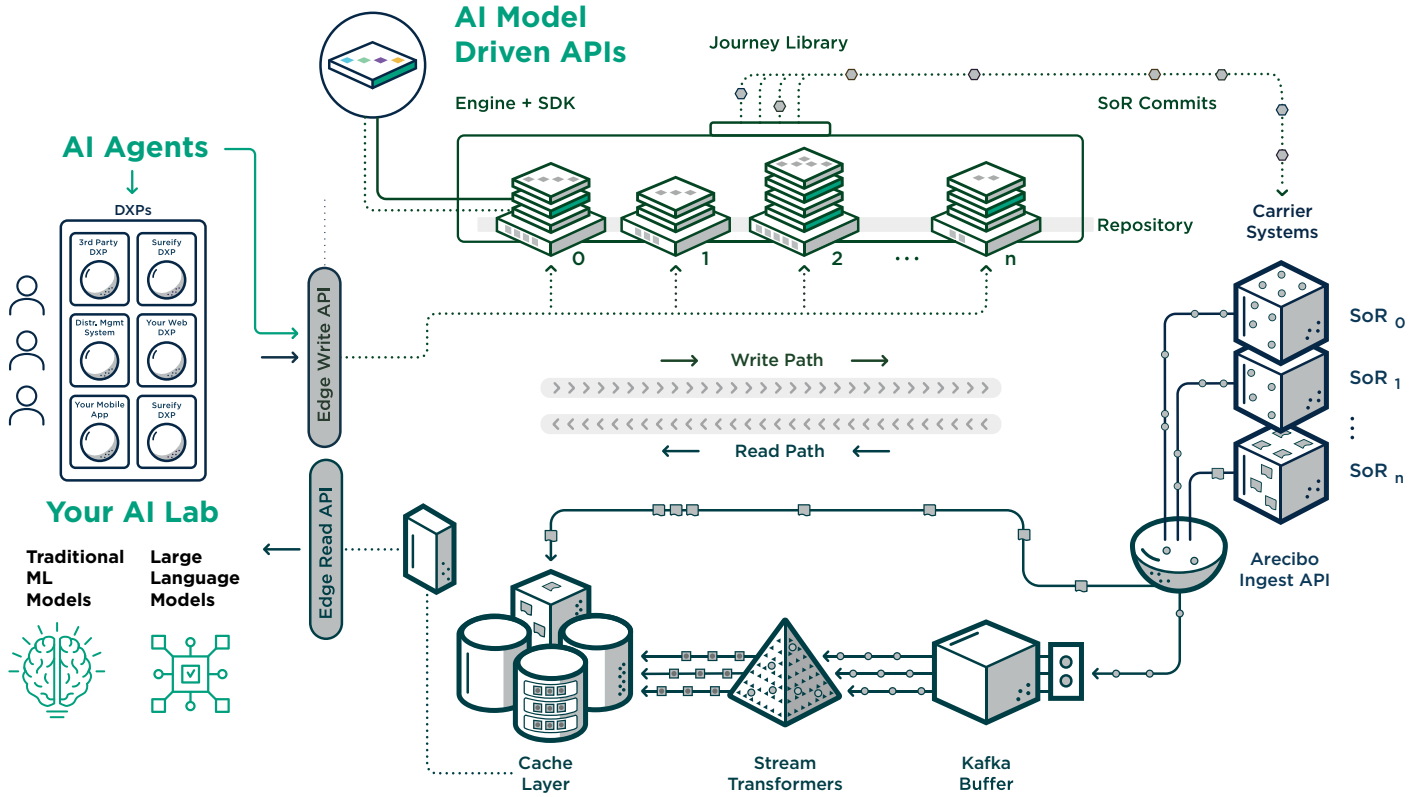
Tracks Workflow History

Maintaining a detailed history of the data used to train AI models is only part of the compliance picture. Linking the data to a comprehensive history of the models used by workflow steps in digital experiences is also necessary. CoreCONNECT Journeys provide this step-by-step picture and audit history at the model API level.

Maintains AI Development Environment Versioning

AI development environments like Microsoft’s Azure AI, Salesforce Einstein, and Amazon Bedrock & SageMaker track training data and model versions in the APIs they generate to implement the models. CoreCONNECT Journeys provide detailed tracking of the use of those APIs.

AI SOLUTIONS POWERED BY CoreCONNECT... PUTTING IT ALL TOGETHER



Whether it be through an existing system (e.g., a carrier using Salesforce AI), an internally developed model, or new AI vendor, carriers and their distributors have access to a wealth of AI options. Despite the abundance of available solutions, the AI value chain is only as strong as its weakest link. Effective execution of AI models depends on solving foundational data and workflow challenges.

CoreCONNECT bridges the gap between legacy systems of record and the vibrant ecosystem of AI products and services entering the market. It solves system of record “roadblocks” that stand in the way of training and retraining AI models while simultaneously interacting seamlessly with existing legacy systems of record to complete AI-triggered and supported process steps. All this is accomplished within a framework

that ensures data transparency and management vital to AI compliance and safety.

CoreCONNECT addresses the biggest challenges life and annuity carriers and their distributors face when building AI solutions into their digital experiences (DXPs) and workspaces:

Data to Train & Deploy AI Models

Impactful AI strategies require a continuous flow of up-to-date information to train and retrain models. This is where previous generations of data warehousing strategies break down because they were not designed to support production digital experiences. CoreCONNECT supports the consolidation and transformation of structured data, as well as the transmission and use of valuable unstructured data (e.g., documents, call recordings, etc.).

Back-End Workflows for AI Models

Do not let legacy systems force the delivery of legacy digital experiences. With CoreCONNECT, this is no longer necessary. The CoreCONNECT Journey architecture orchestrates multi-step digital experiences that involve many AI-triggered actions for a single digital experience, all the while ensuring a robust and fault-tolerant experience.

AI Security and Compliance

A secure and compliant AI development environment must be built from the ground up to include both the basics of access security controls and the layers of encryption required for data both at rest and in transit. To fully ensure the safety of data, AI development

environments must also support de-identified and obfuscated data when appropriate. From day one, a comprehensive audit trail of training data and workflow execution data on model versions must be maintained for each step in every journey.

Whether you are working with internal AI model development using AI Development Environments or relying on AI vendor solutions, success demands solving these three challenges. Our CoreCONNECT platform provides the infrastructure needed to fully capitalize on your piece of the \$1.1 trillion in economic value from AI.

Let's talk about what CoreCONNECT can do for your business.



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