iOPEX

📡 Telecommunications   📍 Global

Telecom Leader Transforms CX with
Agentic AI-Led Genesys Cloud Migration

A leading telecommunications provider operating one of the largest contact-centre environments in the UK supports millions of customer interactions annually across retail, broadband, mobile, and enterprise services. As part of a multi-year CX modernization programme, the organization initiated a strategic migration from Genesys On-Prem to Genesys Cloud to enable cloud-native, scalable customer engagement.

Highlights

- The client needed to modernize complex, high-volume contact-center operations while migrating from legacy telephony to **Genesys Cloud**, without disrupting service quality.

- iOPEX implemented a **governed Agentic CX architecture,** unifying telephony, CRM, knowledge, and workflows through Data Studio, AgenticAI Studio, and Runtime + AgentOps.

- The solution enabled up to **40% reduction in call volumes** and handling times on critical desks, with **65% autonomous resolution of transactional queries** and materially improved agent productivity and consistency.

Business Challenges

As part of its enterprise-wide CX modernization agenda, the client was migrating from legacy on-premise contact-center infrastructure to a cloud-based engagement platform. While the transition was foundational to long-term agility, it surfaced immediate operational challenges:

The organization was migrating from **Genesys On-Prem to Genesys Cloud** as part of a broader CX modernization initiative, introducing new orchestration requirements across telephony, CRM, and workflow systems.	Frontline agents operated across fragmented environments, **Genesys, ServiceNow, Salesforce, and legacy tools,** requiring manual context switching that increased handling time and reduced first-contact resolution.	High volumes of policy-driven and transactional queries (contracts, diagnostics, service eligibility) consumed disproportionate capacity on critical service desks.	Native **Genesys Cloud ↔ ServiceNow agent-to-agent (A2A)** integrations were not yet available, limiting seamless workflow handoffs and real-time context propagation.

To meet its target of materially reducing call volumes and average handling times, the client required an intelligence layer capable of real-time orchestration across systems, rather than incremental automation within individual tools. The client needed intent interpretation, policy-driven actions, and autonomous query resolution. They also needed a cloud-native, event-driven architecture capable of scaling across their vast CX operations.

iOPEX Solution

iOPEX implemented a **platformized Agentic CX architecture** designed to operate as a system of engagement across the client's cloud contact-center ecosystem.

Embedding the Intelligence Layer: ElevAIte Data Studio

Purpose

Create a unified, real-time CX knowledge and data foundation that Agentic CX Agents could rely on for fast, contextual, and consistent decision-making across voice and digital interactions.

Unified Ingestion Fabric

- Ingested **Genesys voice interactions and AudioHook streams** for real-time conversational context.

- Connected customer account and case context from **ServiceNow**.

- Integrated transactional, entitlement, and contract data from **Salesforce**.

- Unified policy repositories, diagnostic trees, troubleshooting knowledge, interaction histories, and resolution outcomes.

Semantic CX Intelligence

- Intent-indexed semantic retrieval across CRM, service, and knowledge systems.

- Entity and relationship mapping across customer → product → policy → workflow.

- Contextual enrichment of live voice interactions using metadata and historical outcomes.

Outcome

A real-time CX intelligence backbone connecting **Genesys telephony → CRM → workflows → knowledge,** enabling decision-ready context for every interaction.

Designing Voice and Digital Command Agents: AgenticAI Studio

Purpose

Build domain-specialized CX Command Agents capable of interpreting telecom-specific intent, executing actions, and managing escalation across high-volume contact center operations.

Command Agents Built

- Voice Command Agents for real-time audio interpretation
- Next-Best-Action Agents for policy-based decisioning
- Escalation & Routing Agents for workflow handoff
- Unified Workspace Assist Agents for chat/digital

Agent Studio Features Used

- Multi-modal prompts (audio + text + metadata).
- Cross-system tool calling.
- Policy alignment via governance templates.
- Real-time prototyping of voice-to-action flows.

Agent Capabilities

- Interpret intents from Genesys AudioHook streams.
- Automate policy-driven actions (contract retrieval, lookups, diagnostics).
- Trigger escalations for human "super agents" with full context.
- Pull contextual data from ServiceNow & Salesforce dynamically.
- Make autonomous decisions for transactional queries.

Outcome

A suite of Agentic Voice & Digital Agents capable of resolving queries autonomously or handing off with full context.

Automating Execution with Governance: Runtime + AgentOps

Purpose

Enable end-to-end, cloud-native orchestration across Genesys Cloud, CRM, and service systems with built-in governance and human assurance.

Autonomous Workflow Execution

- End-to-end coordination across **Genesys Cloud, ServiceNow, and Salesforce.**

- Real-time context assembly for voice-driven action flows.

- Multi-system updates via API orchestration.

- Transparent escalation with context persistence.

AgentOps Governance Layer

- Confidence scoring for every autonomous action.

- Guardrails for regulated or sensitive operations.

- Human-in-the-loop assurance paths for high-impact cases.

- End-to-end audit trails for voice-driven decisions.

Connected Systems

- Genesys Cloud (AudioHook, telephony)

- ServiceNow (case management, CRM context)

- Salesforce (contracts, entitlements)

- Knowledge and policy repositories

Outcome

A fully governed, event-driven CX orchestration layer capable of operating at telecom scale.

Agent Classification

Agent Type
System-of-Engagement (SoE) Agentic Architecture

Full cross-system orchestration across telephony, CRM, and workflow ecosystems.

Autonomy Level
L3 Governed Autonomy

- Autonomous resolution for transactional queries
- Human-in-the-loop for complex or regulated operations

Systems Connected

- Genesys Cloud
- ServiceNow
- Salesforce
- Knowledge and policy systems

The Impact

The Agentic CX transformation delivered measurable improvements across efficiency, service quality, and operational resilience.

Efficiency Gains

- Up to **40% reduction in call volumes and handling times** on critical desks.
- **65% autonomous resolution** of transactional service queries.
- Reduced re-explain and context-gathering time during escalations.

Quality Customer Experience

- Faster, more accurate intent-based routing.
- Lower customer friction through reduced repetition.
- Stronger consistency via policy-aligned automation.

Operational Impact

- Reduced complexity through decoupled legacy systems.
- Modernized CX foundation enabling faster product and service launches.
- Unified data layer powering future AI accelerators.

Strategic Outcome

The client unlocked a future-proof, omni-channel Agentic CX platform aligned to their modernization goals.

About iOPEX

iOPEX Technologies is a new-generation agentic AI and automation-led enterprise transformation partner headquartered in San Jose, California. At the intersection of enterprise operations, agentic AI, and intelligent automation, we deliver Intelligence as a Service, helping organizations embed intelligence directly into workflows for measurable impact. Over 70 global brands trust iOPEX to transform operations, accelerate revenue growth, and unlock value at scale. Contact us at **marketing@iopex.com.**