Data & Al



**CLIENT STORY** 

# Orchestrating the Future of Music with Al

# Story snapshot

Amdaris, an Insight company, has a long-standing relationship with nkoda, having played a pivotal role in the development of their original multi-platform app: a single digital portal that would transform how students, musicians, professors and orchestras around the world learn and share music.

From day one, nkoda's vision was bold: to create a seamless digital access point for millions of pages of sheet music across 7 platforms, all within a tight launch timeframe. The app needed to manage 30–40 million pages of content while maintaining data integrity, and be built on a highly scalable architecture to support long-term growth.

Following the success of that initial delivery, nkoda once again partnered with Amdaris, an Insight company, this time to go even further, embedding Al at the core of the user experience. Together, we developed ARIA-I, an intelligent orchestration assistant that marks a new era for Al-powered music education and composition.

## Challenge

nkoda is a pioneer in digital music publishing. With a vast, subscription-based library of over 30 million pages of sheet music from more than 90 leading publishers. But in 2024, they saw a new opportunity: to bring AI to the heart of their platform.

With a growing user base of musicians, educators and orchestras, nkoda identified a need for intelligent, context-aware musical assistance that could offer expert-level insights and orchestration support. The challenge: deliver this functionality at scale, while integrating with a vast, proprietary digital music library and maintaining nkoda's uncompromising musical standards.

Amdaris, an Insight company, answered the brief by developing ARIA-I, a sophisticated AI assistant designed specifically for music education. Delivered as an end-to-end solution over just six months in 2024, ARIA-I combines multiple AI models to deliver contextual responses and guidance across a wide range of musical tasks.

"Amdaris,an Insight company, came to us highly recommended. We wanted a team that was exclusively working for us within their firm. And the people we had were truly our people. They have been singularly dedicated to us and you could feel it in the quality they delivered."

Sundar Venkitachalam, CTO & Co-Founder, Nkoda

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#### **Solutions & Outcomes**

Amdaris, an Insight company, delivered an end-to-end Al solution in just six months: ARIA-I, a powerful music-specific assistant combining large language models, orchestration tools and deep content integration.

ARIA-I is built on a Retrieval-Augmented Generation (RAG) framework in .NET and Angular, enabling it to draw from nkoda's extensive proprietary music library in real time.

It orchestrates multiple state-of-the-art Al models – including GPT-4, Claude, Meta Llama 3/3.1, and a fine-tuned Llama 3.1 – to generate tailored, intelligent responses to musical prompts.

# What sets ARIA-I apart?

- Intelligent orchestration and education support powered by a blend of GPT-4, Claude, Meta Llama 3/3.1, and fine-tuned Llama 3.1 models · RAG-based architecture built using .NET and Angular, ensuring rapid scalability and adaptability
- Seamless integration with nkoda's exclusive music library from over 90 global publishers
- Cloud-native deployment leveraging Azure Functions, Cosmos DB, and Azure Storage
- Cost-conscious design, despite elevated compute requirements of hosting advanced custom models

The application is supported by robust DevOps pipelines, ensuring continuous delivery and performance at scale. As a result, nkoda now leads the charge in bringing Alassisted music education and composition tools to the industry – with Amdaris, an Insight company, as its trusted innovation partner.

## Why Amdaris & Insight?

From the outset, nkoda trusted Amdaris, an Insight company, with a Herculean task - to deliver a scalable, multi-platform music app that would redefine how the industry accesses and shares sheet music. We not only delivered at pace and scale, but became an integral part of their business, reshaping how they think about technology. Building on that success, nkoda turned to us once again - this time to lead their Al transformation. In just six months, we delivered ARIA-I, an intelligent orchestration assistant that revolutionises how musicians

learn, create and collaborate worldwide.

In just six months, Amdaris, an Insight company, helped nkoda bring AI to the heart of their platform.

By creating ARIA-I, an AI assistant that combines multiple models, we transformed how musicians, educators, and orchestras engage with nkoda's 30-million-page library.

