

CASE STUDY · KNOWLEDGE TRANSFER

AI avatars that capture tribal knowledge from veteran technicians

An AI avatar that interviews your most experienced technicians while they work, captures the undocumented know-how behind critical assets, and turns it into an interactive training assistant new operators can question at any hour.



At a glance

24/7	Retained	EN / ES
Access to expert answers on the floor	Know-how stays when a technician retires	Bilingual answers for mixed workforces

Overview

The problem

Critical equipment — especially in injection molding and specialty processes — is only fully understood by a handful of long-tenured technicians. Manuals are outdated, and when those people leave, the know-how walks out with them.

What we built

We build AI avatars that interview technicians while they work, asking the right questions at the right moment to extract undocumented setup, troubleshooting and maintenance expertise. The avatar learns step by step and turns that expertise into an interactive, searchable training assistant.

The result

New operators can ask the avatar how to set a mold, diagnose a fault or tune a cycle — and get answers drawn from the people who actually ran the machine, preserving knowledge permanently inside the company.

How it works

01 Guided interviews on the machine

The avatar asks the technician targeted questions during setup, changeover and troubleshooting — the moments when tacit knowledge actually surfaces.

02 Voice and video capture

Answers, gestures and machine states are captured together, so a mold change or a fault diagnosis is recorded as a real procedure, not a paragraph in an outdated manual.

03 Knowledge extraction

Sessions are structured into procedures, failure modes, settings and rules of thumb, then cross-checked with the technician so nothing is misinterpreted.

04 Interactive training assistant

New operators ask the avatar how to set a mold, diagnose a fault or tune a cycle, and get answers grounded in what your own people do — available in English and Spanish.

What we deliver

- Asset and process prioritization workshop
- Structured interview sessions with your veteran technicians
- Validated procedure, failure-mode and settings library
- Deployed avatar assistant for operators and new hires
- Ongoing capture plan as processes and equipment change

Best fit for

- Injection molding, machining and specialty process areas
- Plants facing retirements or high turnover in skilled roles
- Operations where manuals no longer match the real machine

Stack: AI avatar interviews · Voice & video capture · Knowledge extraction · Interactive training assistant

Talk to us about a similar system — manufacturinginfusion.tech