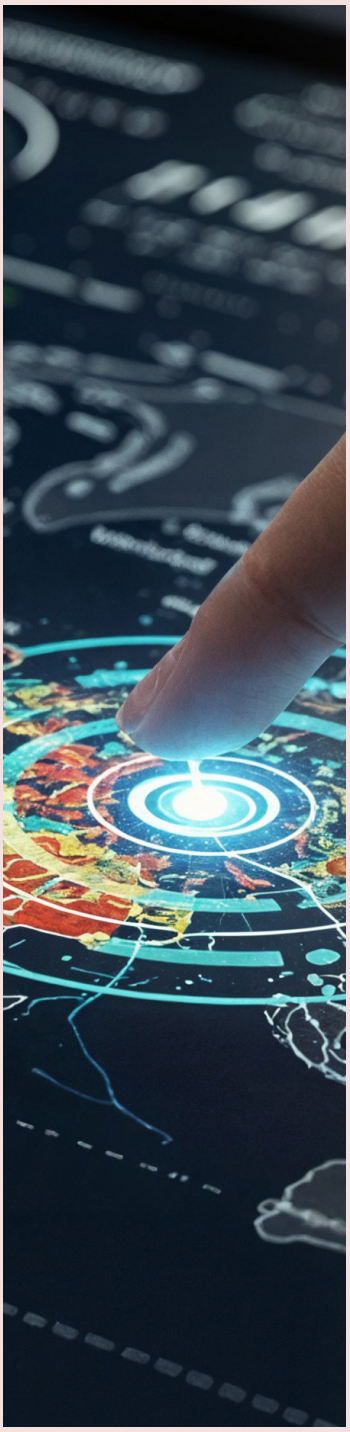
CASE STUDY



ACCELERATING AVERY DENNISON'S CX MODERNIZATION THROUGH AI-POWERED REVERSE ENGINEERING

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Executive Summary

Avery Dennison partnered with Infosys to fast-track its CX modernization by leveraging an AI-powered solution to automate D2Comm legacy code analysis. This shifted a traditionally manual, error-prone reverse-engineering process into a highly accurate, automated workflow. As a result, the team achieved an 80% reduction in analysis cycle time dropping from five days to one - significantly accelerating their broader CX transformation journey.

About The Client

Avery Dennison Corporation (NYSE: AVY) is a global materials science and digital identification solutions company. They are Making Possible™ products and solutions that help advance the industries they serve, providing branding and information solutions that optimize labor and supply chain efficiency, reduce waste and mitigate loss, advance sustainability, circularity and transparency and better connect brands and consumers. They design and develop labeling and functional materials, radio-frequency identification (RFID) inlays and tags, software applications that connect the physical and digital and offerings that enhance branded packaging and carry or display information that improves the customer experience. Serving industries worldwide, including home and personal care, apparel, general retail, e-commerce, logistics, food and grocery, pharmaceuticals and automotive. They employ approximately 35,000 employees in more than 50 countries. Their reported sales in 2025 were $8.9 billion. Learn more at www.averydennison.com.

The Problem Statement

Manual analysis of complex D2Comm legacy systems slowed the CX modernization process. Uncovering functional logic required extensive review by SMEs.

Volume & Complexity

Manual extraction of functional intent from the massive codebase was unsustainable and error-prone.

>3.25M	70+	15K
Total LOC	**RBO Count**	**Item Count**

SME Knowledge Gaps

Critical loss of tribal knowledge for D2Comm which is ~**15-20 year old system**, driven by vendor shifts and personnel transitions.

The Solution

Infosys worked with Avery Dennison to develop a scalable, automated analysis solution that reduced migration risk and exposed concealed business rules embedded in the legacy code.

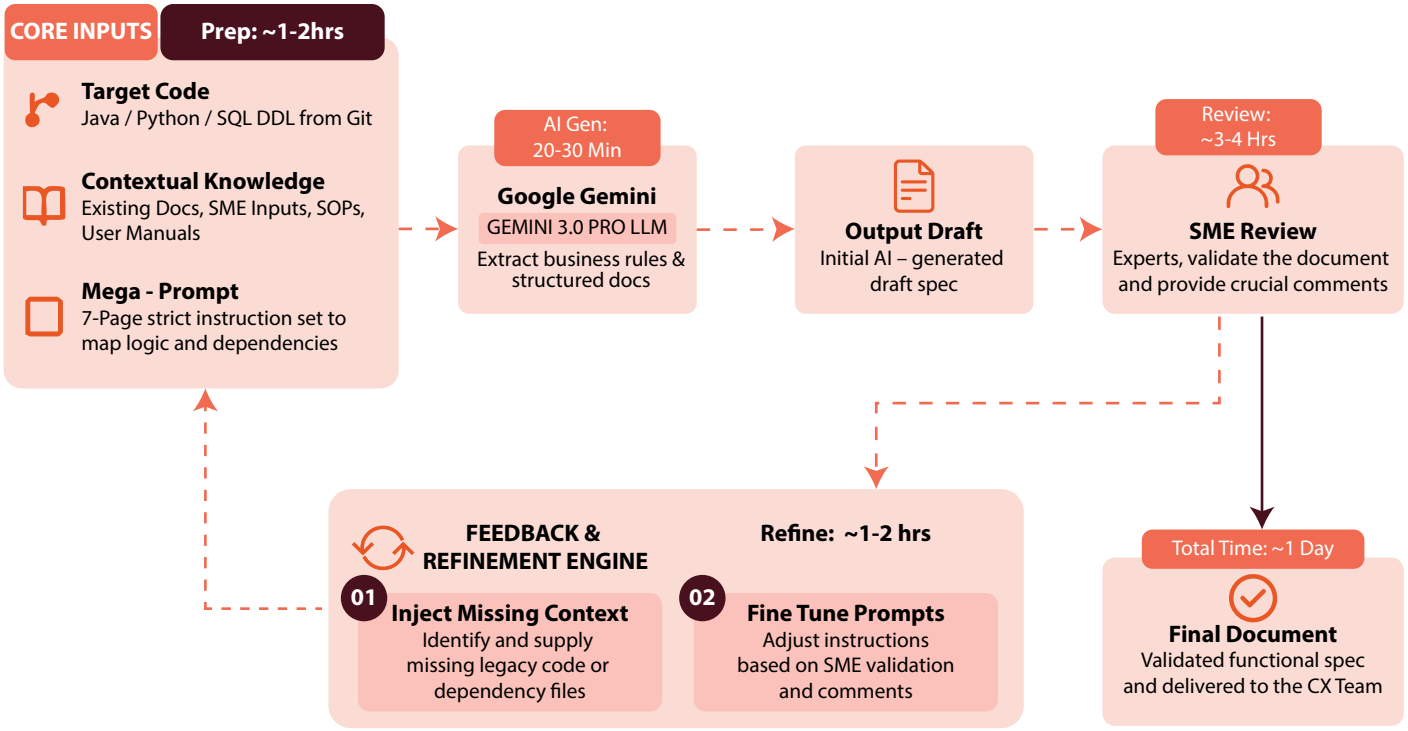
We deployed a high-impact, human-in-the-loop GenAI solution using Google Gemini Enterprise. By creating a reusable 'prompt engine' capable of context injection, the team transformed a multi-day manual analysis process into a streamlined one-day workflow. The result is a scalable asset that can be applied across multiple legacy systems.

The workflow engineered by Infosys has three components:

- **The 'mega-prompt':** In the first instance, Infosys engineered a rigorous seven-page prompt for Gemini Enterprise that acts as the 'reasoning engine.' The prompt document defines strict logic extraction rules and output formats.
- **Context injection:** Next, specific context files such as glossaries and business rules are 'injected' alongside the source code. These direct the AI engine to interpret code through the lens of specific business logic, not generic syntax.
- **Human-in-the-loop validation:** Finally, the AI engine generates a structured functional specification document, which is reviewed and signed off by subject matter experts (SMEs) using in-built collaboration tools. This ensures complete confidence in the output.

AI Powered Architecture

Context-aware pipeline transforming raw code into structured functional specifications.



Value Realization & Future Readiness

Measurable impact and future-ready enterprise configurability.

Realized Benefits

50 Legacy items reverse-engineered, saving thousands of manual hours

80% Effort Saving

Manual effort reduction per item (from 40 hours down to 8 hours).

Potential Benefit

Remaining legacy items queued for automated analysis via pipeline.

~480,000 hours

Total manual effort potential to be saved across 15,000 item backlog.

Scalability

The "mega-prompt" framework is a highly scalable enterprise asset. The solution is adaptable across diverse environments through the strategic fine-tuning of business context and prompt parameters, enabling a consistent modernization workflow.

Client Testimonial

"Infosys provided us with more than just a quick fix; they built a sustainable modernization asset. By perfecting a reusable prompt strategy that leverages 'context injection', we can now tackle multiple legacy systems without starting from scratch every time. What used to be a heavy build process for every new app is now just a simple configuration task. This 80% reduction in setup effort is a game changer for our long-term roadmap."

Sripriya Krishnamurthy
Sr. IT Director, Avery Dennison

For more information, contact askus@infosys.com

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