

80%

Automation on Day 1

95%+

Automation after Day 90

10-14 Weeks

Typical Implementation

The Core Problem

Engineering BOMs and manufacturing BOMs are fundamentally different. Engineering represents how a product is *designed*. Manufacturing represents how it needs to be *built, purchased, and costed*. CADTALK transforms data intelligently — not just copying it — bridging this gap automatically.

Transformation Engine

Field Mapping	Connect CAD properties to ERP fields (description, unit of measure, weight, material)
Conditional Logic	Apply business decisions based on data (if material = steel, then make-buy = make)
Data Transformation	Manipulate values (concatenate fields, enforce character limits, format part numbers)
Structure Rules	Modify BOM hierarchy (flatten phantoms, handle multi-level assemblies, manage configurations)
Validation	Check data quality before transfer

Visual BOM Validation

- **Green:** Part exists in ERP with matching data — ready to proceed
- **Yellow:** Part exists but with changed data — review before saving
- **Red:** New part not yet in ERP — will be created upon save

Key Differentiator: Configurable vs. Custom

CADTALK's rules engine is **configurable, not custom**. Rules can be modified, expressions adjusted, and mappings updated without rewriting code. After 12-18 months, most customers manage their own rules — maintaining independence as processes evolve.

Ideal Customer Profile

Company Types

- **Industrial Manufacturers** with complex BOMs
- **Discrete Manufacturers** producing custom or configured products
- **Aerospace & Defense** contractors with compliance requirements
- **Construction Firms** managing large-scale projects

Decision Makers

- **CIO / CTO** — Strategic technology leadership
- **Engineering Managers** — Process optimization
- **ERP Administrators** — System integration
- **Manufacturing Engineers** — Production efficiency
- **Production Managers** — Operational excellence