Intelligent Automation for SAP Transformations

Custom Code Transformation – Challenges, Solutions, & Real-World Successes

About Me

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smartShift

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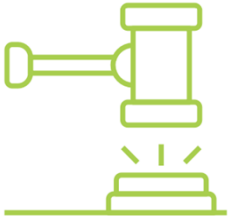
Custom Code is Needed!



46%

Needed as a result of regulatory requirements

45%

Essential for innovation

35%

Essential due to localization or geographics

32%

Provides us with competitive advantage

50% **Custom code provides a unique user experience**

28% **Custom code is a core component in our digital transformation**

Source - ASUG Market Research: Custom Code and Digital Transformation

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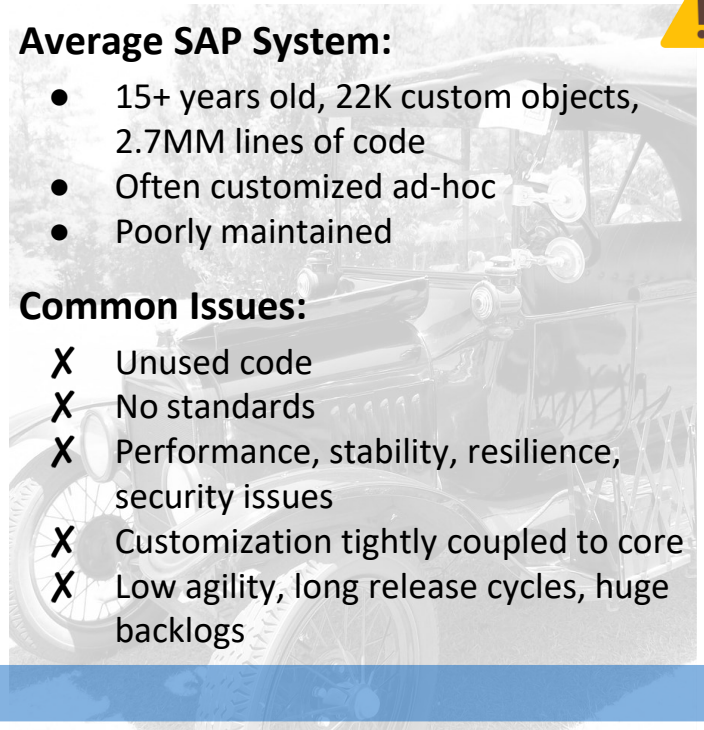
Custom Code Challenges & Opportunities

From a Legacy of Inflexibility to a Future of Agile Extensibility



Average SAP System:

- 15+ years old, 22K custom objects, 2.7MM lines of code
- Often customized ad-hoc
- Poorly maintained

Common Issues:

- ✗ Unused code
- ✗ No standards
- ✗ Performance, stability, resilience, security issues
- ✗ Customization tightly coupled to core
- ✗ Low agility, long release cycles, huge backlogs

S/4HANA

- ✓ Streamlined Processes
- ✓ Simplified Data Model
- ✓ Greater Opportunities to Revert to Standard
- ✓ Enabling Platform for Future Innovation

Clean Core

- ✓ Frictionless Upgrades
- ✓ Scalable customization
- ✓ Lean development teams
- ✓ Agile deployment
- ✓ Standard APIs
- ✓ Focus on innovation

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smartShift Overview

GLOBAL LEADER IN AUTOMATED ENTERPRISE TRANSFORMATIONS

Industry
LEADER
Intelligent Automation

EXPERTS in legacy transformations

PATENTED
Intelligent Automation Platform

20+
YEARS R&D

1000+
Cloud, SAP Transformation and Migration Projects

100+ successful Suite on HANA projects

100+ successful S/4HANA transformations

CERTIFIED
ISO 27001, AWS MAP & MSP

Cloud Migration, Managed Services partnerships with
AWS, Azure, GCP

smartShift worked with 2 out of 5
S/4HANA Business Transformation
finalists in 2021

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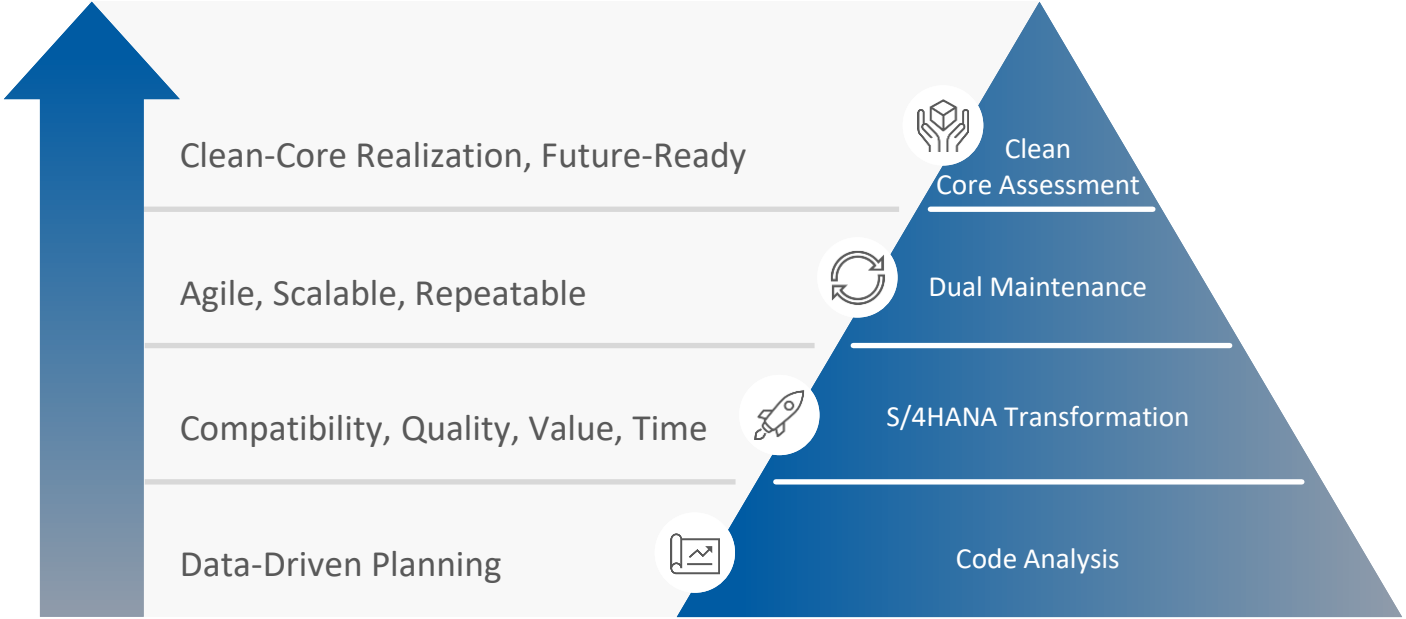
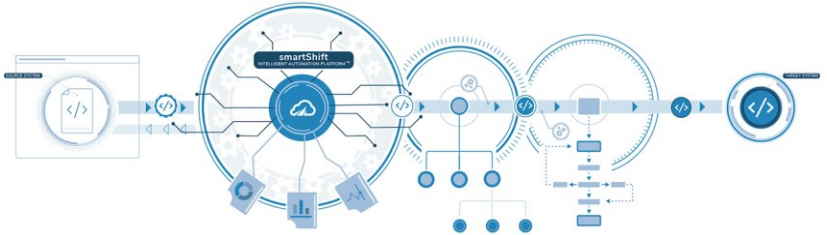
smartShift – Custom Code Solution Continuum



powered by
smartShift Intelligent Automation™



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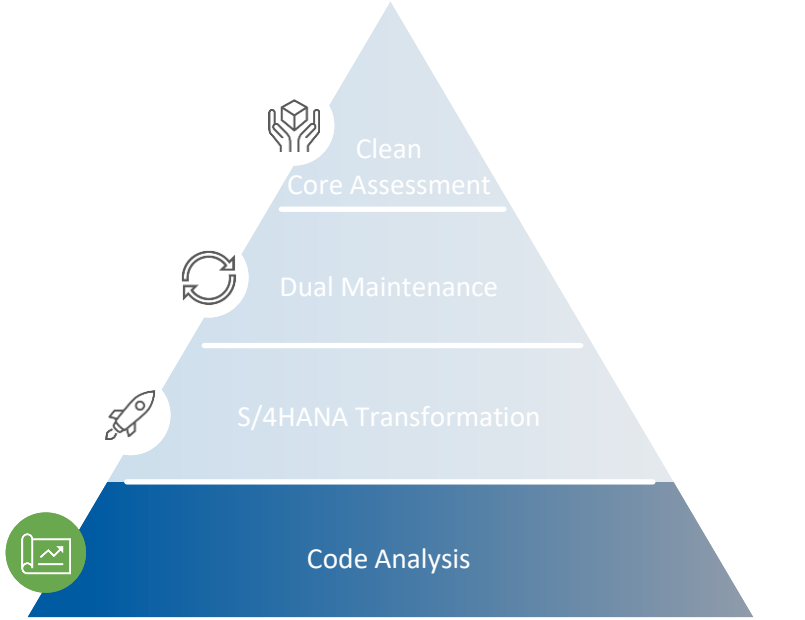
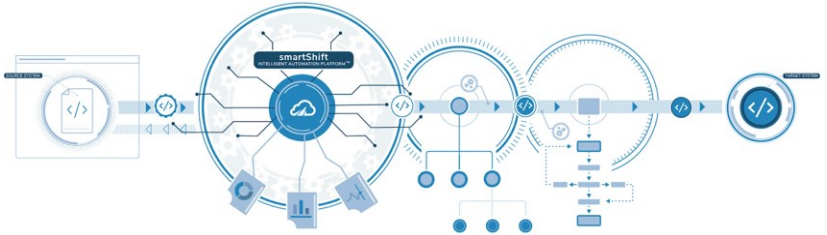
smartShift – Custom Code Analysis

Category	Description
Namespaces analyzed	Y*, Z*, /BMW/*
Release	SAP BASIS 731; SAP_APPL 606
Unicode Enabled	Yes
System Size	Large (L)

Category	Metrics
Total number of ABAP Objects	18.623
Lines of Code (LOC) ABAP	2.092.672
Lines of Code (normalized*)	1.358.279
Commenting Rate	35% (Benchmark 30%)

	230.882	67.943
	5.170	485
# HANA Code Compliance (readiness)	3.343	1.169
# HANA Performance Optimization	11.573	3.172
# General code performance	49.697	14.900
# Quality / Stability	156.269	47.306
# Security	4.830	911
# Issues / 1000 LOC	170	130





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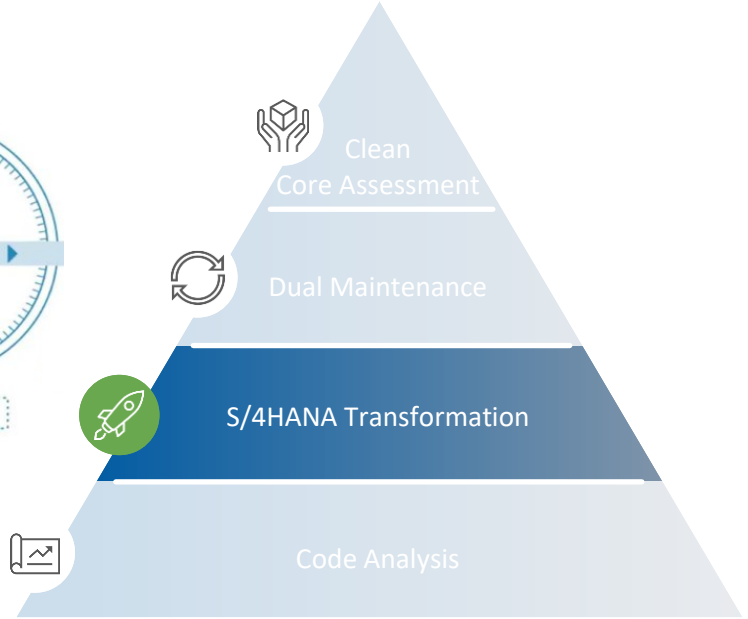
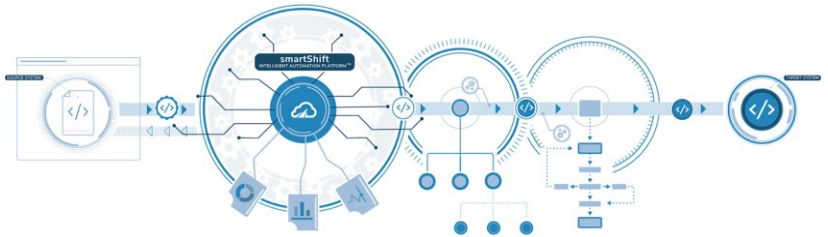
Custom Code Transformation





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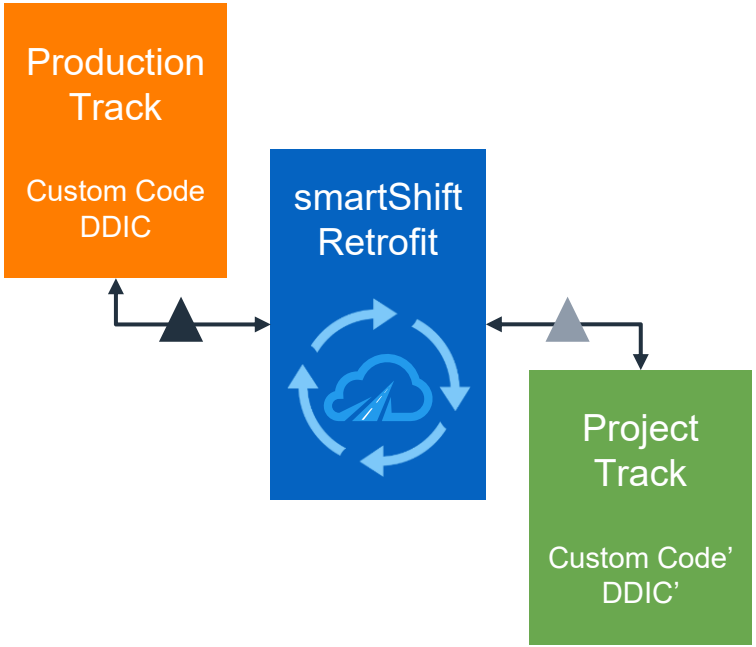
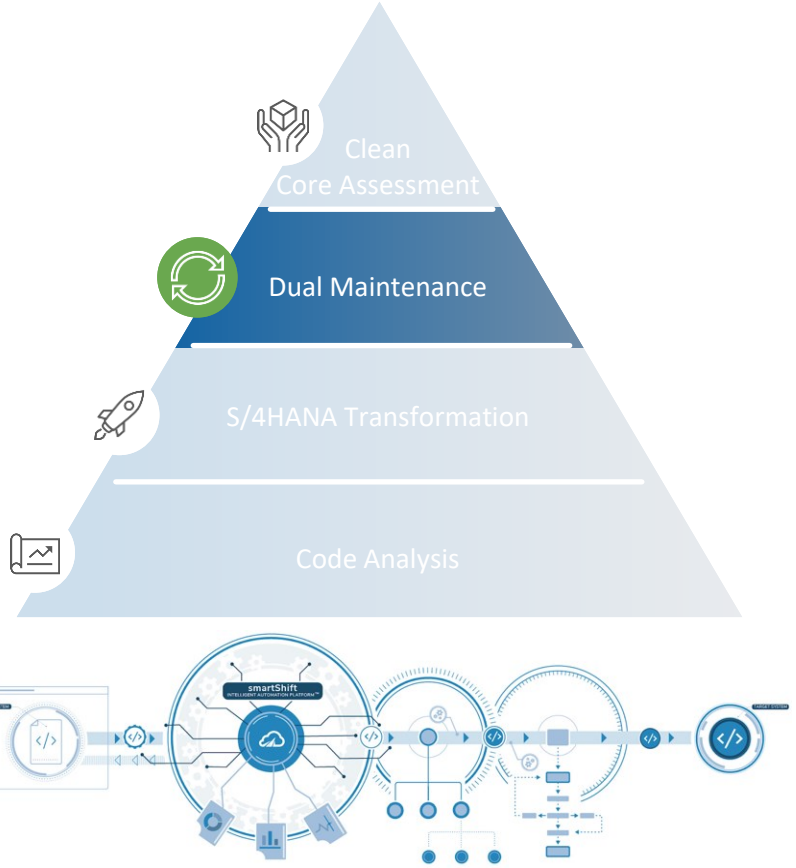
Automated Dual Maintenance Solution





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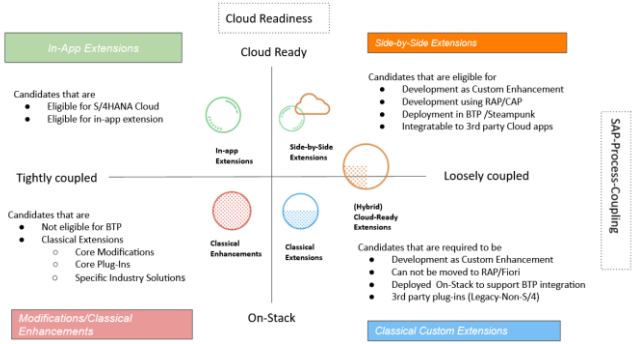
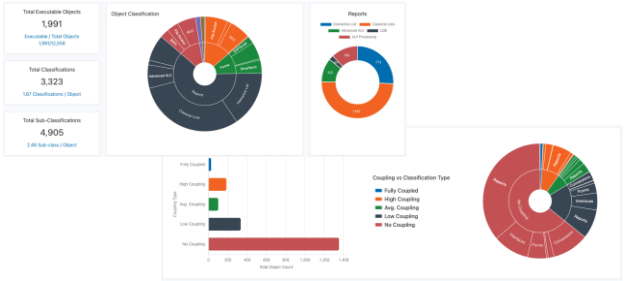
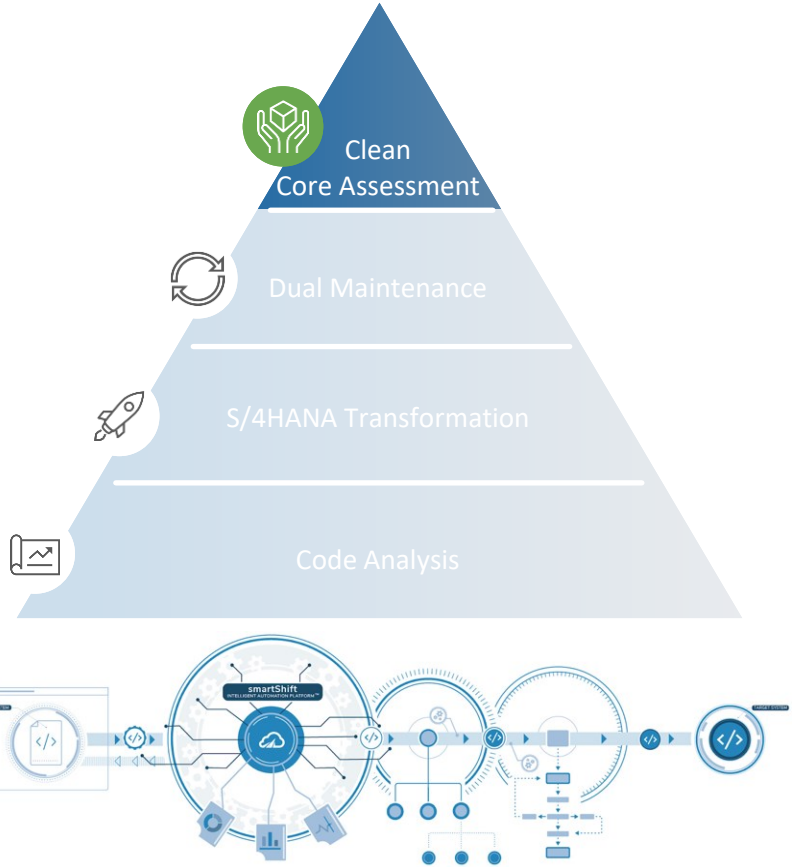
Clean Core Assessment

Clean-Core Assessment







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Recent S/4HANA Customer Success

Trusted solutions for the largest SAP customers in the world

- S/4HANA migration factory for 80+ system landscape
- Automation for S/4HANA, security, standardization, and performance
- Agile, sprint methodology
- To date:
  - Over 60 projects completed
  - 10MM+ LoC, 100k+ objects remediated
  - Over 7MM EUR saved
  - MM of obsolete LoC safely decommissioned

- ECC to S/4HANA
- 46K custom ABAP objects
- Dual Maintenance automated with smartShift Retrofit
  - Critical enabler of agile continuous development & test process

- Multi-wave ECC to S/4 rollout
- 42K custom ABAP objects / 3.5MM lines of code
- Transformation and optimization
- Selective data/carve-out approach
- Automated Dual Maintenance with smartShift Retrofit ensuring continuous alignment ECC to S/4HANA

- Automation for 200k custom ABAP objects. Manual approach not feasible.
- 9 system consolidation to 3 templates + S/4HANA conversion
- Strategic development partner
  - Automated Interface Identification
  - Dual Maintenance
  - Clean-Core Modernization

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Next Steps

Test drive our analysis capabilities

A free custom code health check to gain insight into your SAP modernization roadmap

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