smartShift

Intelligent Automation for SAP Transformations

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

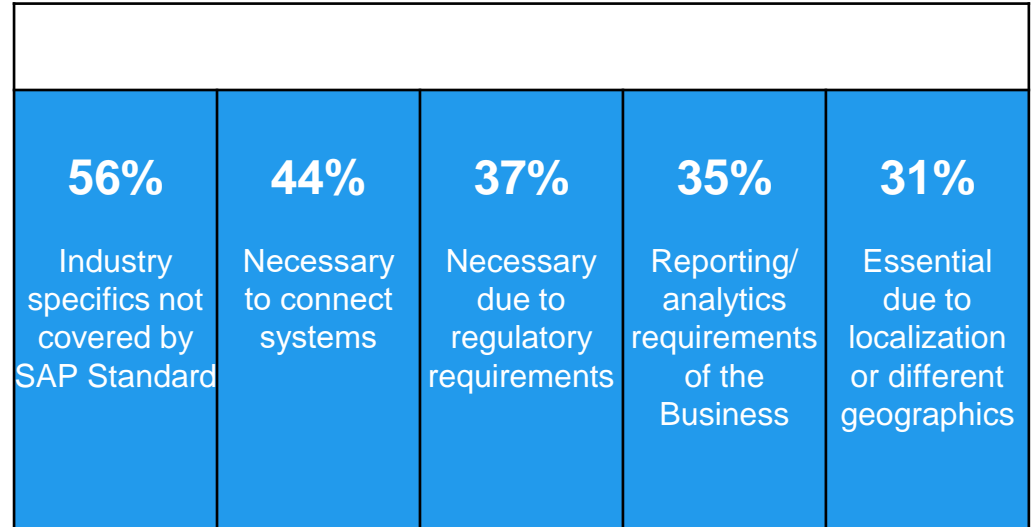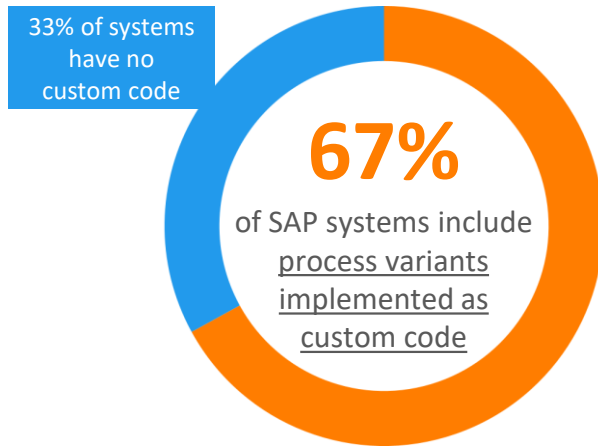ASUG Kentucky Chapter Meeting

About Me

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Most SAP customers have custom code

33% of systems have no custom code

67% of SAP systems include <u>process variants implemented as custom code</u>

|				
56% Industry specifics not covered by SAP Standard	**44%** Necessary to connect systems	**37%** Necessary due to regulatory requirements	**35%** Reporting/ analytics requirements of the Business	**31%** Essential due to localization or different geographics

Q. Approximately how much of your current SAP system would be considered SAP standard?
Q. Approximately how much of your current SAP system includes process variants implemented as custom code processes?
(n=169) *9 respondents selected 'Don't know/not sure'
Q. In your opinion, why does your organization need custom code? (Please select all that apply.)

Custom code needs to be upgraded

As customers upgrade their SAP systems, they'll need to remediate and transform their custom code

72%

plan to continue using custom code
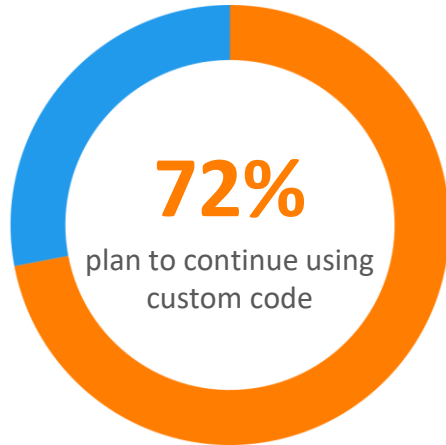
As organizations move forward with SAP S/4HANA or other SAP system upgrades, the bulk of respondents will continue to use custom code

Q. As your organization moves forward with SAP S/4HANA or other SAP system upgrades, how will your organization's custom code be handled? (Please select all that apply.) (n=177)

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Custom code presents challenges

...and the majority of SAP customers will seek outside help

"What challenges does custom code present to your organization?"

Barrier to upgrading/migrating to a new SAP offering	Excessive maintenance costs	Difficulty finding expertise to maintain/enhance custom code
58%	**39%**	**37%**

Source: smartShift/ASUG Market Research

ASUG

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

SAP
Quality
Awards

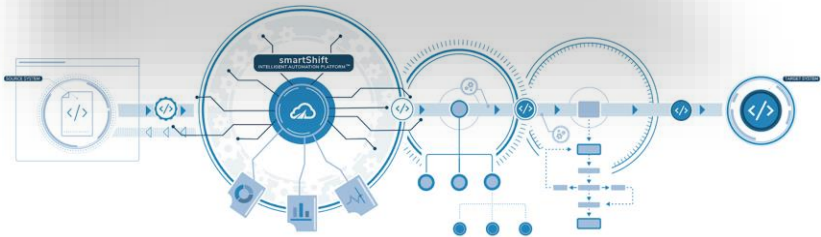smartShift worked with 2 out of 5
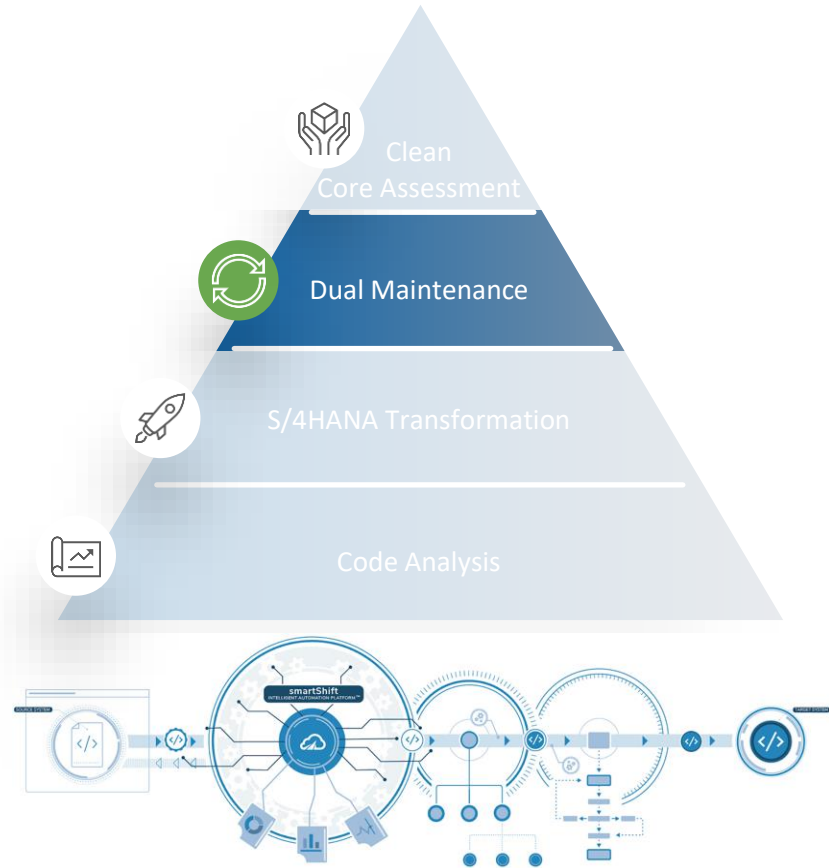**S/4HANA Business**
Transformation
finalists in 2021

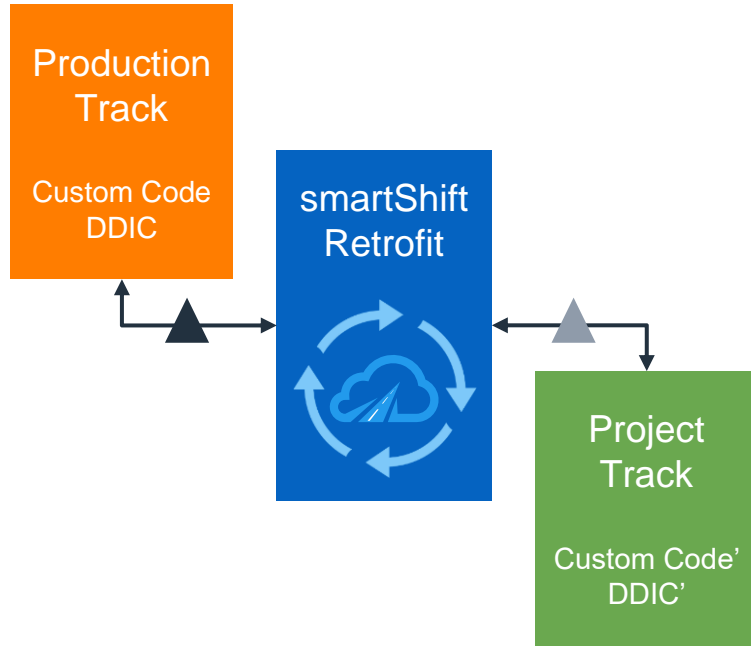# smartShift – Custom Code Solution Continuum

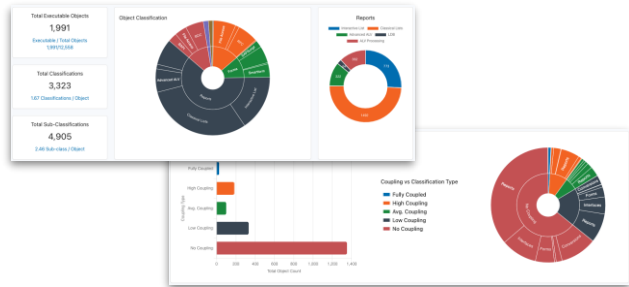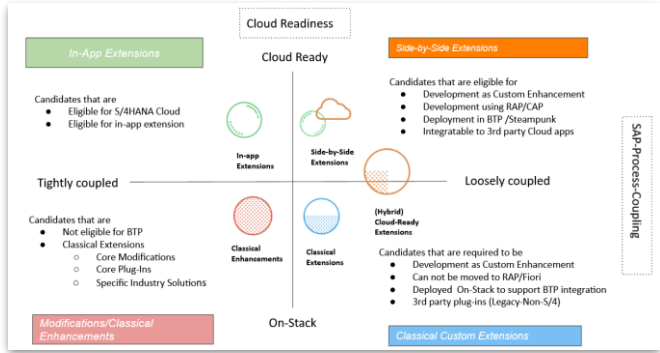Clean-Core Realization, Future-Ready

Agile, Scalable, Repeatable

Compatibility, Quality, Value, Time

Data-Driven Planning

Clean Core Assessment

Dual Maintenance

S/4HANA Transformation

Code Analysis
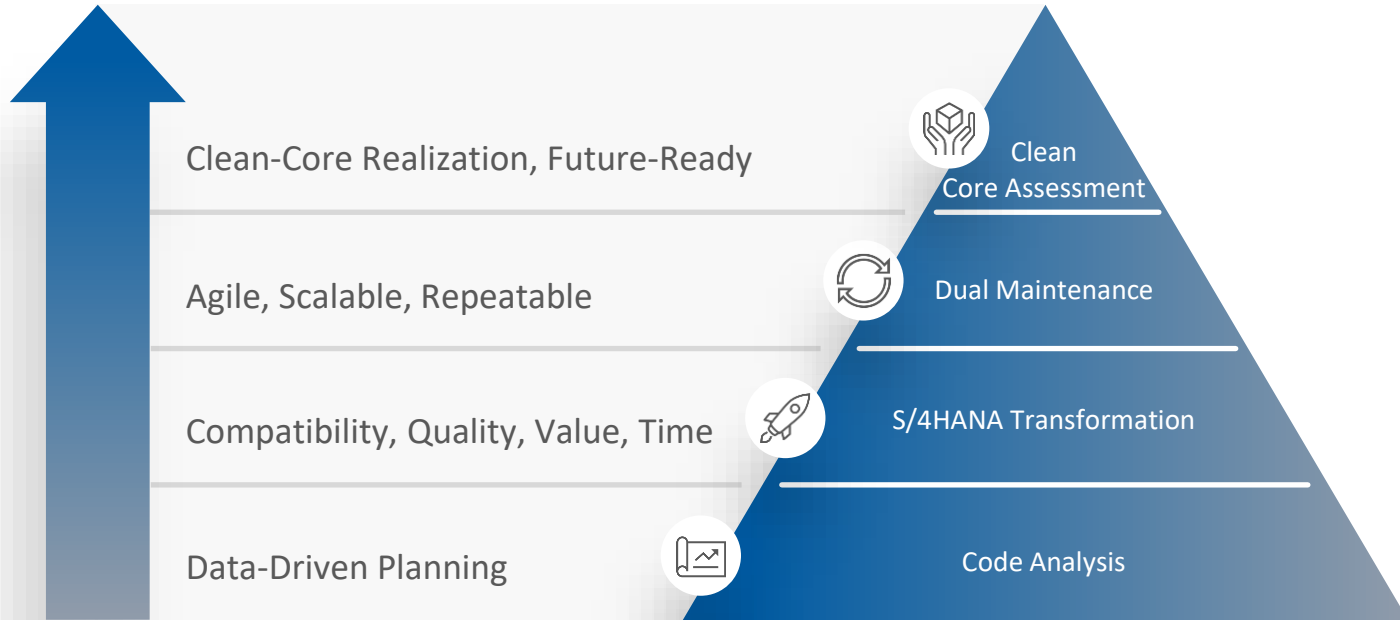
powered by
smartShift Intelligent Automation™

smartShift

Custom Code Analysis

Custom Code Transformation

Example: PROG : Z▓▓▓▓▓▓

```
SELECT SINGLE KWERT INTO I_MVMTS-ZFSU FROM KONV "▓▓▓▓
  WHERE KNUMV = W_KNUMV                           "▓▓▓▓
    AND KPOSN = I_MVMTS-INV_POSNR                 "▓▓▓▓
    AND KSCHL = 'ZFSU'.                           "▓▓▓▓
```

Before code

```
SELECT KWERT FROM V_KONV "▓▓▓▓▓▓          "$smart: #600 #610
  WHERE KNUMV = @W_KNUMV                       "$smart: #232
    AND KPOSN = @GS_I_MVMTS-INV_POSNR          "$smart: #110 #232
    AND KSCHL = 'ZFSU'
  ORDER BY PRIMARY KEY INTO @GS_I_MVMTS-ZFSU UP TO 1 ROWS.  "$smart: #110 #232 #600
ENDSELECT.                "▓▓▓▓▓▓                     "$smart: #600
```

After code

Clean Core Assessment

Dual Maintenance

S/4HANA Transformation

Code Analysis

Automated Dual Maintenance Solution

Production Track

Custom Code DDIC

smartShift Retrofit

Project Track

Custom Code' DDIC'

Clean Core Assessment

Dual Maintenance

S/4HANA Transformation

Code Analysis

Clean Core Assessment
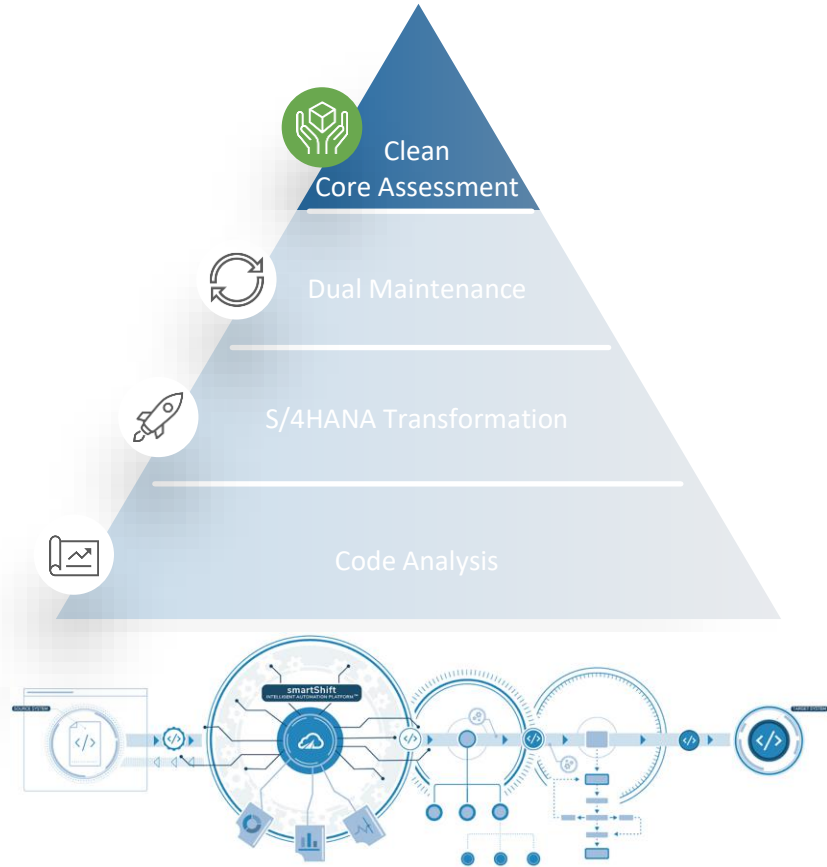
Real-world successes

- S/4HANA migration factory for 80+ system landscape

- Automation for S/4HANA, security, standardization, and performance

- Agile sprint methodology

- To date:
  - Over 65 projects completed
  - 10MM+ LoC, 100k+ objects remediated
  - Over 7MM EUR saved
  - MM of obsolete LoC safely decommissioned

Real-world successes

- ECC to S/4HANA
- 46k custom ABAP objects; 5 million LoC remediated
- Dual Maintenance automated with smartShift Retrofit
- Critical enabler of agile DevOps Continuous Integration/Continuous Deployment (CI/CD) & test process

Real-world successes

- Multi-wave ECC-to-S/4HANA rollout

- 42k custom ABAP objects/3.5MM lines of code

- Transformation and optimization

- Selective data & code carve-out approach

- Automated Dual Maintenance with smartShift Retrofit ensuring continuous alignment of ECC to S/4HANA

Real-world successses

- Automation for 200k custom ABAP objects
  - Manual approach not feasible
- Consolidation of 9 regional systems consolidation to 3 global templates + S/4HANA conversion
- Strategic development partner
- Dual Maintenance
- Clean Core Modernization

smartShift was awarded P&G's **2022 External Business Partner Award** in the **Innovation** category:
Congratulations to P&G's 2022 External Business Partner Excellence Award Winners!

Next Steps

Test drive our analysis capabilities

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