



Intelligent Automation for SAP Transformations:

How Automation De-Risks Custom Code Modernization

# About Me

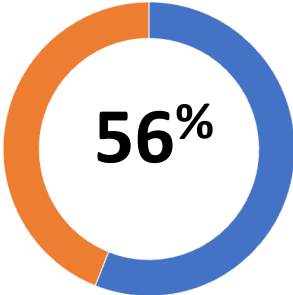
**Marques Green**  
Account Executive

[mgreen@smartshift.com](mailto:mgreen@smartshift.com)  
512-633-8031

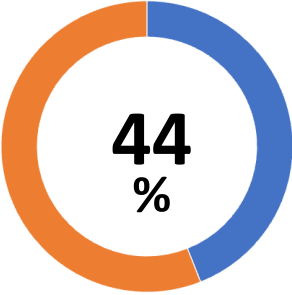


# Custom Code is Needed

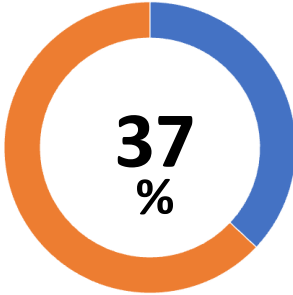
ASUG Research Findings



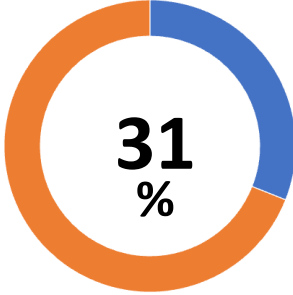
Industry specifics  
not covered by  
SAP Standard



Necessary to  
connect  
systems



Necessary  
due to  
regulatory  
requirements

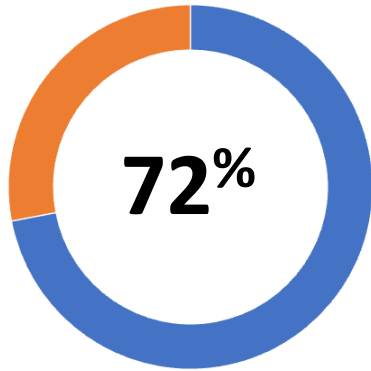


Essential  
due to localization  
or different  
geographies

Source: smartShift/ASUG Market Research

# Custom Code Remains Critical

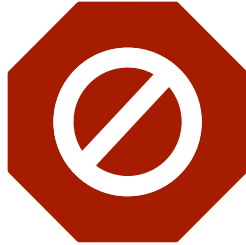
As customers upgrade their SAP systems, they'll need to remediate and transform their custom code



The majority of survey participants plan to retain their custom code as they proceed with upgrading to S/4HANA and beyond

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)

# Custom Code Presents Challenges for Modernization



Barrier to upgrading/  
migrating to a new  
SAP offering

**58%**



Difficulty finding expertise  
to maintain/enhance  
custom code

**37%**

Source: smartShift/ASUG Market Research

# Automation Offers Modernization Options



## Speed

**Accelerate** the transformation process by **minimizing the need for manual remediation**



## Confidence

Enhance the overall **quality, security, and stability** of the transformed code



## Productivity

**Eliminate** the need for **business disruption**



## Innovation

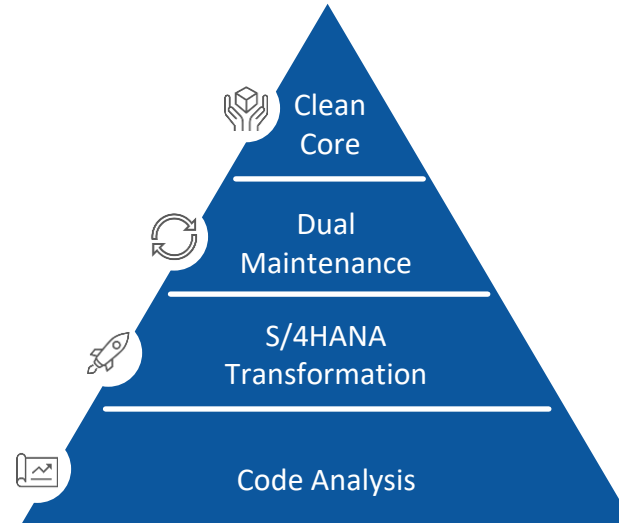
**Modernize** the system to be more **flexible, scalable, and agile**



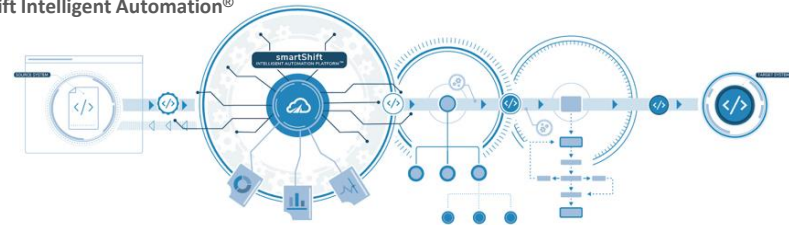
- The only Intelligent Automation for SAP Custom Code Transformations
- 11 Patents - 10+ years of SAP ABAP Research & Development
- 3300 Successful SAP Transformation Projects
- 3.5+ Billion lines of Code Remediated with <0.01% Code Transformation Error Rates



At smartShift, we develop and deliver automated solutions to accelerate business growth and de-risk the transformation of SAP custom code and applications.

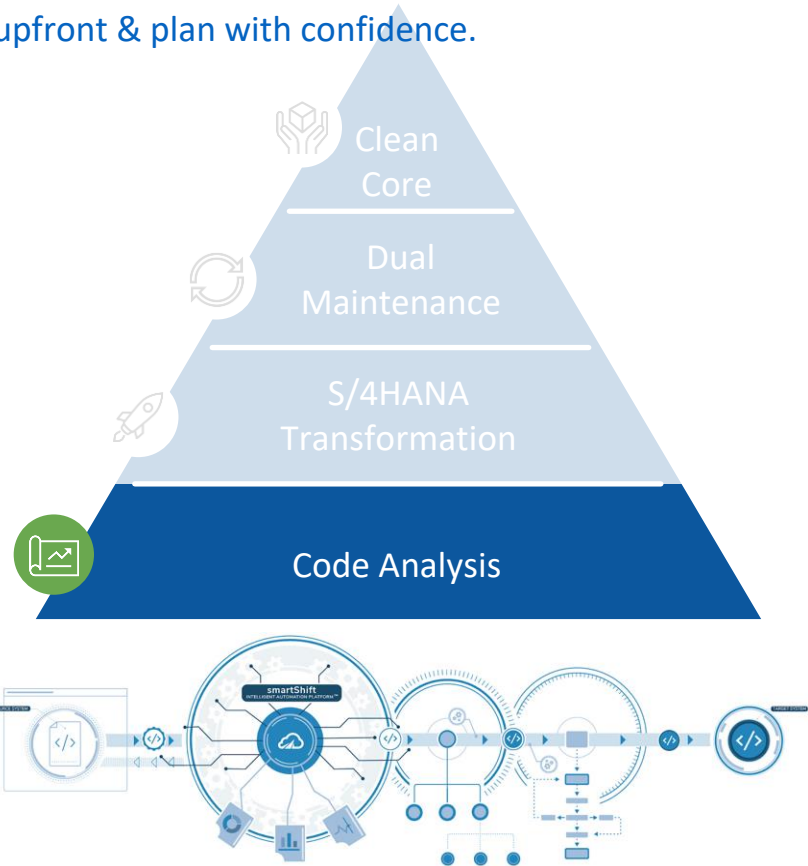


powered by  
smartShift Intelligent Automation®



# Custom Code Analysis

De-risk with data-driven planning. Know all changes for S/4 upfront & plan with confidence.



powered by  
smartShift Intelligent Automation®

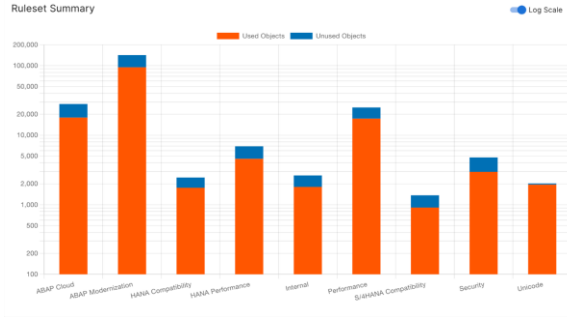


# Custom Code Transformation

Comprehensive transformation. Guaranteed quality - 1,000X better than manual approach.

## Ruleset Summary

| Rule Set              | All Objects | Used Objects |
|-----------------------|-------------|--------------|
| ABAP Cloud            | 28,082      | 17,906       |
| ABAP Modernization    | 141,579     | 94,824       |
| HANA Compatibility    | 2,463       | 1,757        |
| HANA Performance      | 6,910       | 4,577        |
| Internal              | 2,635       | 1,805        |
| Performance           | 25,035      | 17,291       |
| S/4HANA Compatibility | 1,366       | 912          |
| Security              | 4,780       | 2,974        |
| Unicode               | 2,023       | 1,947        |



```

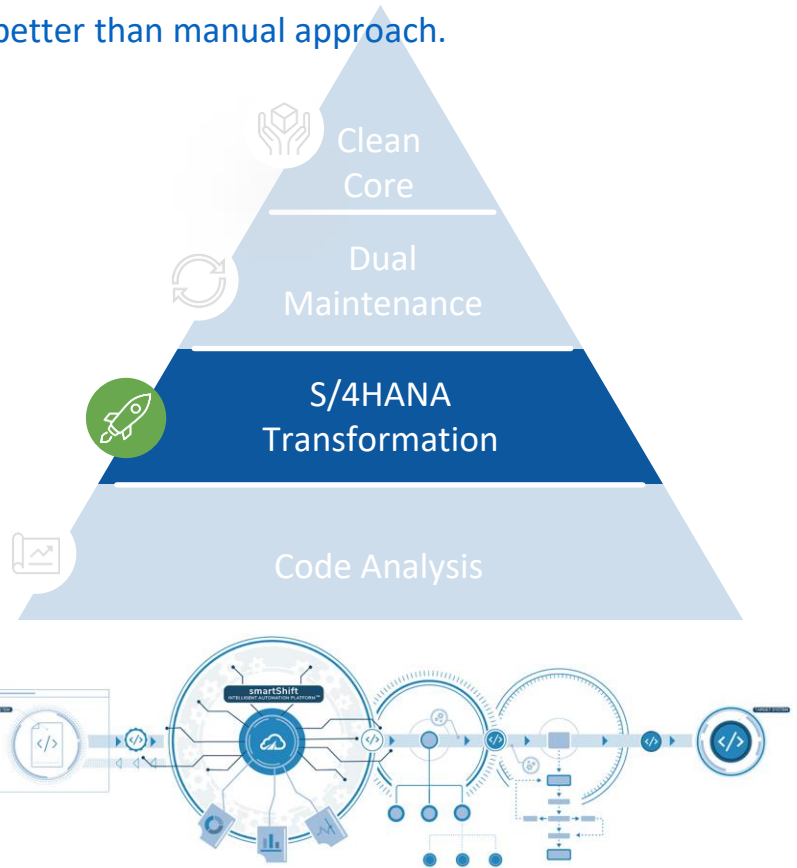
TABLES : bseg.
DATA gt_fag_l_bseg_tmp TYPE fag_l_bseg.
*Smart: 633
*smart (E) - #633 Detected access to DB table BSEG. (A)
c_l_fag_l_emu_cvrt_services=>get_leading_ledger(
IMPORTING
  ed_rldnr = DATA(gv_rldnr)
EXCEPTIONS
  error = 4
  others = 4 ).
IF sy-subrc = 0.
CALL FUNCTION 'FAGL_GET_GL_DOCUMENT'
EXPORTING
  l_rldnr = gv_rldnr
  l_bukrs = '1'
  l_belnr = '2'
  l_gjahr = '3'
  l_buzei = '4'
IMPORTING
  et_bseg = gt_fag_l_bseg_tmp
EXCEPTIONS
  not_found = 4
  others = 4.
IF sy-subrc = 0 AND gt_fag_l_bseg_tmp IS NOT INITIAL.
  bseg = gt_fag_l_bseg_tmp[ 1 ].
  FREE gt_fag_l_bseg_tmp.
ENDIF.
    
```

```

TABLES : bseg.
SELECT SINGLE *
FROM bseg
WHERE bukrs = '1'
AND belnr = '2'
AND gjahr = '3'
AND buzei = '4'.
    
```

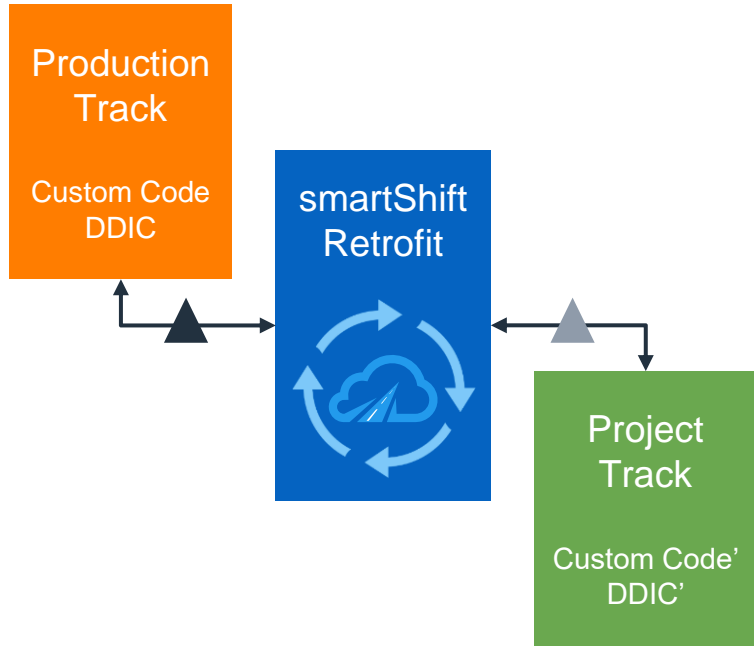


powered by  
smartShift Intelligent Automation®

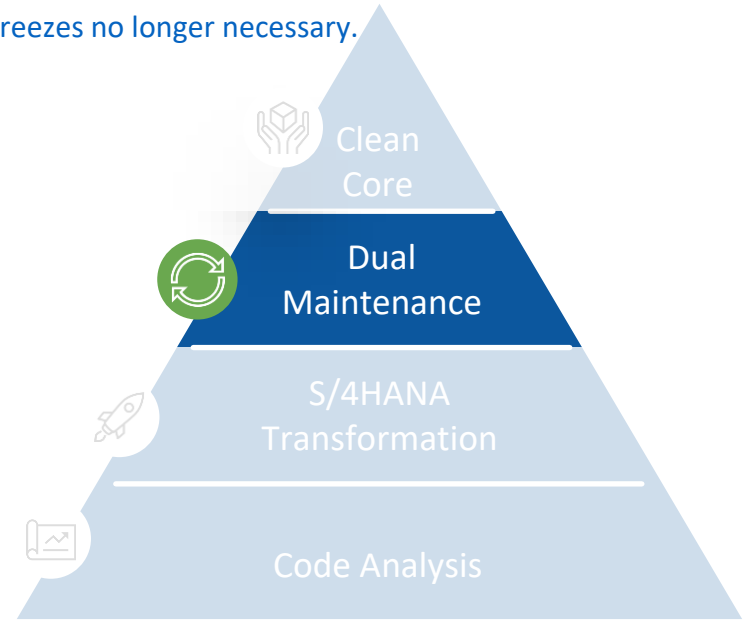


# Automated Dual Maintenance

Enables business agility & innovation. Dev restrictions, prolonged code freezes no longer necessary.

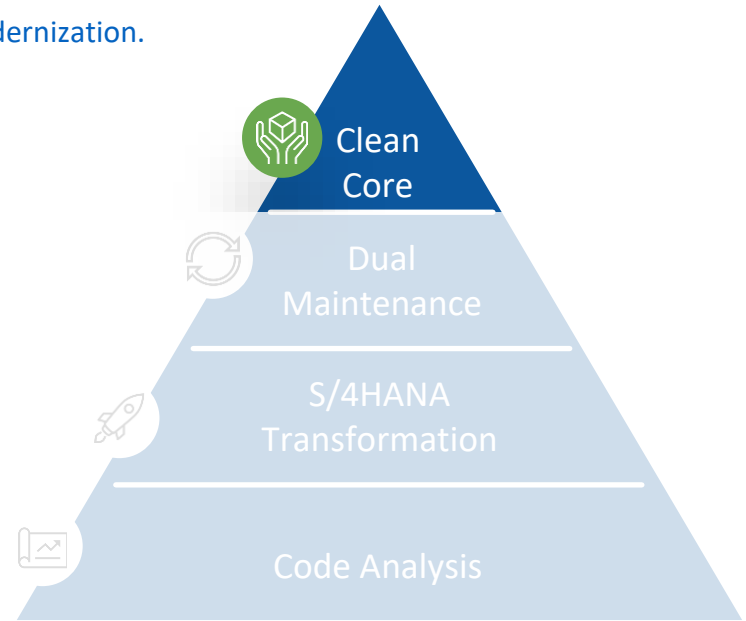
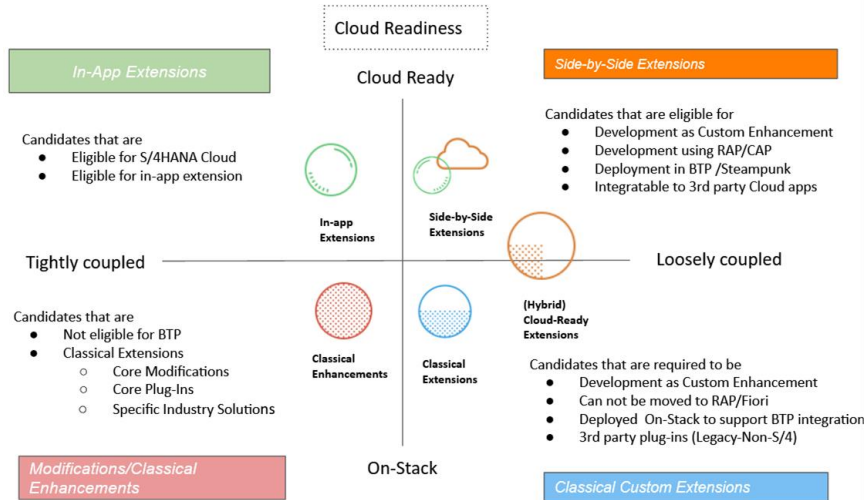


powered by  
smartShift Intelligent Automation®



# Clean Core Assessment

Informed feasibility, design, approach, and planning for application modernization.



powered by  
smartShift Intelligent Automation®

# smartShift Overview - Global Customers



# Recent S/4HANA Customer Success

Trusted solutions for the largest SAP customers in the world - just like you



- 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

**JABIL**

- 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/4HANA 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

# smartShift Advantage

“smartShift works at industrial scale with virtually no errors. The defect rate is so low because they have automated everything and reduced the human touch as much as possible.”

**Dilip Kumar**

Global Supply Chain Platform Architect, Procter & Gamble



# Better Together

Test drive our analysis capabilities

A complimentary rapid code analysis to gain insight into your SAP modernization roadmap









