smartShift

Intelligent Automation for SAP Transformations

How Automation De-Risks Custom Code Modernization:
ASUG Research, Solutions, & Real-World Results
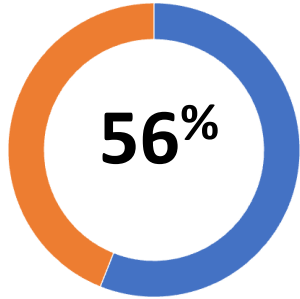
About Me

Ryan Ptacek
Account Executive
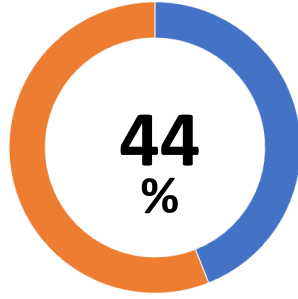
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Custom Code is Needed

ASUG Research Findings

56% — Industry specifics not covered by SAP Standard

44% — Necessary to connect systems
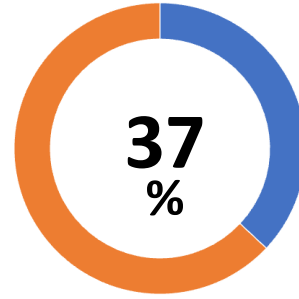
37% — Necessary due to regulatory requirements
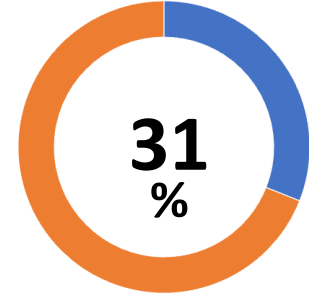
31% — Essential due to localization or different geographies

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

72%
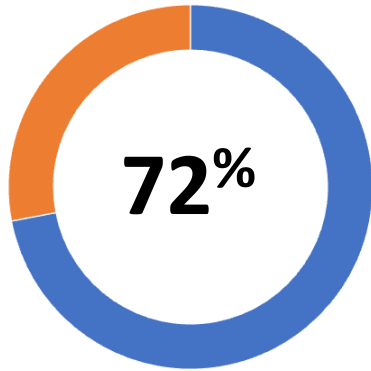
The majority of survey participants plan to retain their custom code as they proceed with upgrading to S/4HANA and beyond

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
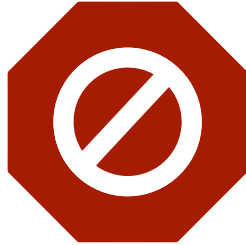
Barrier to upgrading/
migrating to a new
SAP offering

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**

smartShift
Intelligent Automation®

- The only Intelligent Automation for SAP Custom Code Transformations

- 11 Patents - 10+ years of SAP ABAP Research & Development

- 1000+ Successful SAP Transformation Projects

- 2.5+ Billion lines of Code Remediated with <0.01% Code Transformation Error Rates

SAP Quality Awards

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

Clean Core

Dual Maintenance

S/4HANA Transformation
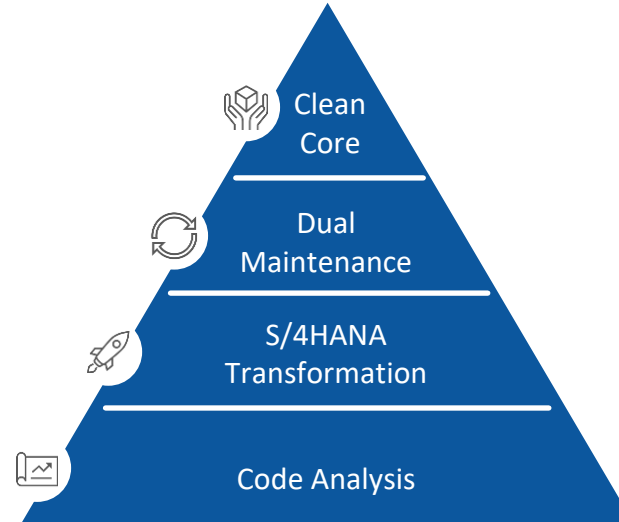
Code Analysis

powered by
smartShift Intelligent Automation®
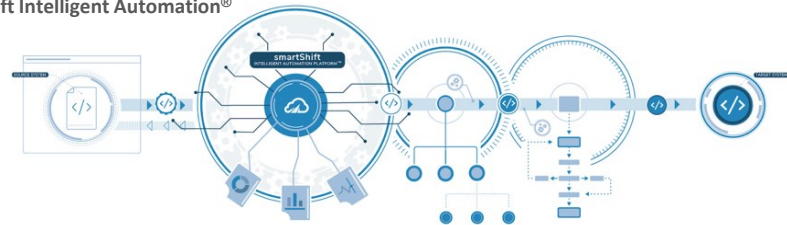
Custom Code Analysis

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

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Custom Code Transformation

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

Ruleset Summary

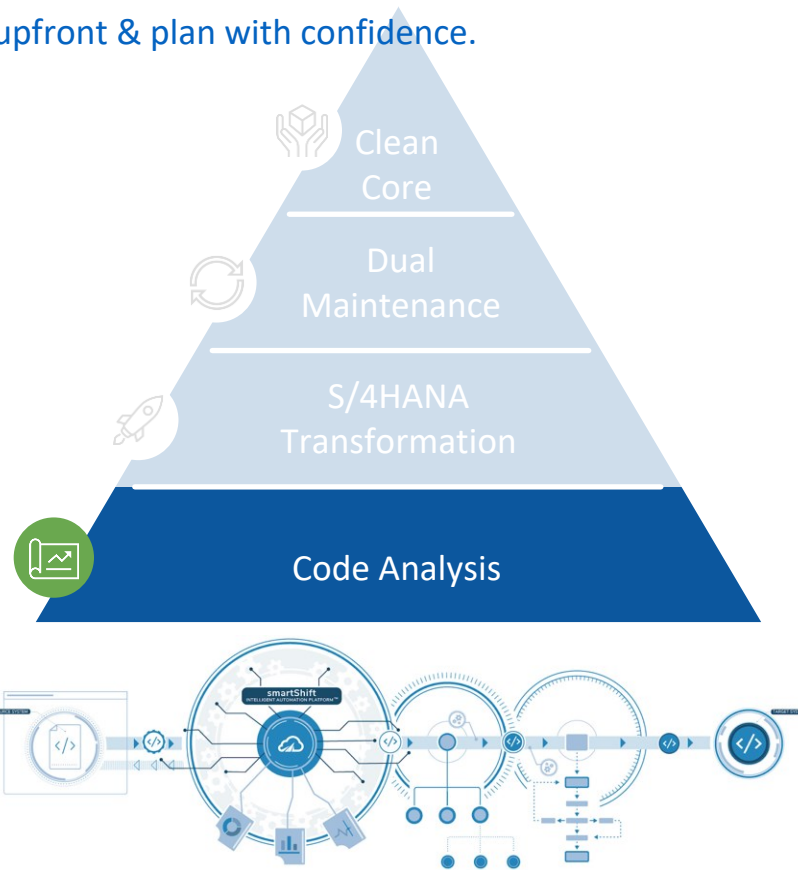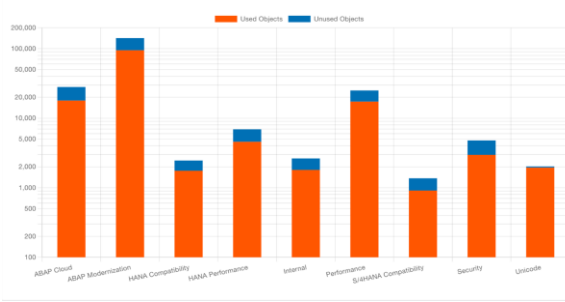| Rule Set	All Objects	Used Objects
ABAP Cloud	28,082	17,906
ABAP Modernization	141,579	94,824
HANA Compatibility	2,463	1,757
HANA Performance	6,910	4,577
Internal	2,635	1,805
Performance	25,035	17,291
S/4HANA Compatibility	1,366	912
Security	4,780	2,974
Unicode	2,023	1,947

Ruleset Summary — Used Objects / Unused Objects — Log Scale
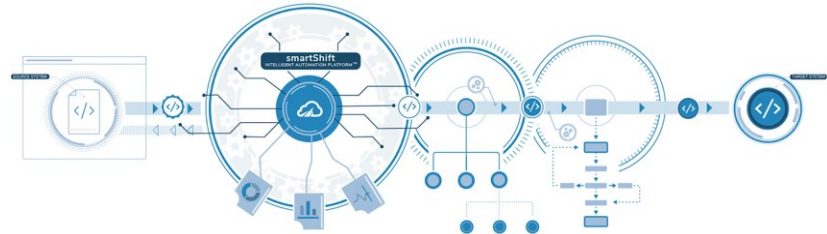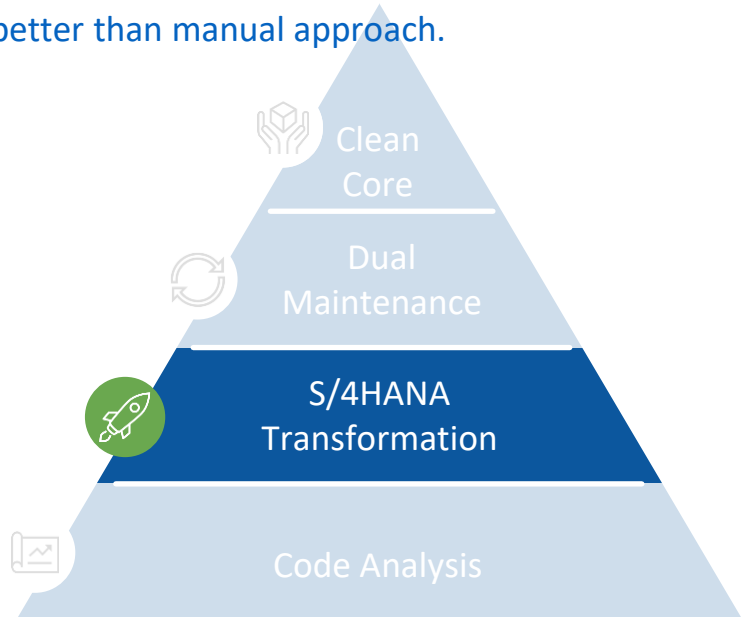
```
TABLES : bseg.

DATA gt_fagl_bseg_tmp TYPE fagl_t_bseg.                    "$smart: 633

*$smart (E) – #633 Detected access to DB table BSEG. (A)

cl_fagl_emu_cvrt_services=>get_leading_ledger(
    IMPORTING                                             "$smart: 633
        ed_rldnr = DATA(gv_rldnr)                         "$smart: 633
    EXCEPTIONS                                            "$smart: 633
        error   = 4                                       "$smart: 633
        others  = 4 ).                                    "$smart: 633
IF sy-subrc = 0.                                          "$smart: 633
    CALL FUNCTION 'FAGL_GET_GL_DOCUMENT'                  "$smart: 633
        EXPORTING                                         "$smart: 633
            i_rldnr = gv_rldnr                            "$smart: 633
            i_bukrs = '1'                                 "$smart: 633
            i_belnr = '2'                                 "$smart: 633
            i_gjahr = '3'                                 "$smart: 633
            i_buzei = '4'                                 "$smart: 633
        IMPORTING                                         "$smart: 633
            et_bseg = gt_fagl_bseg_tmp                    "$smart: 633
        EXCEPTIONS                                        "$smart: 633
            not_found = 4                                 "$smart: 633
            others = 4.                                   "$smart: 633
    IF sy-subrc = 0 AND gt_fagl_bseg_tmp IS NOT INITIAL.  "$smart: 633
        bseg = gt_fagl_bseg_tmp[ 1 ].                     "$smart: 633
        FREE gt_fagl_bseg_tmp.                            "$smart: 633
    ENDIF.                                                "$smart: 633
ENDIF.                                                    "$smart: 633
```
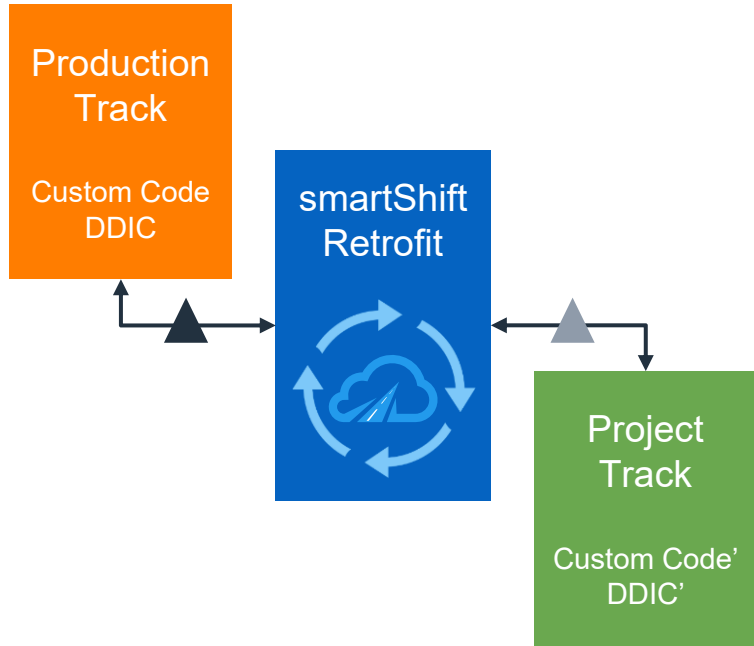
```
TABLES : bseg.

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

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Clean Core

Dual Maintenance

S/4HANA Transformation

Code Analysis

Automated Dual Maintenance

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

Production Track

Custom Code DDIC

smartShift Retrofit

Project Track

Custom Code' DDIC'

Clean Core

Dual Maintenance
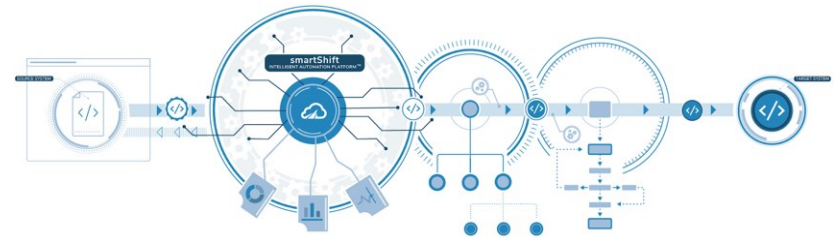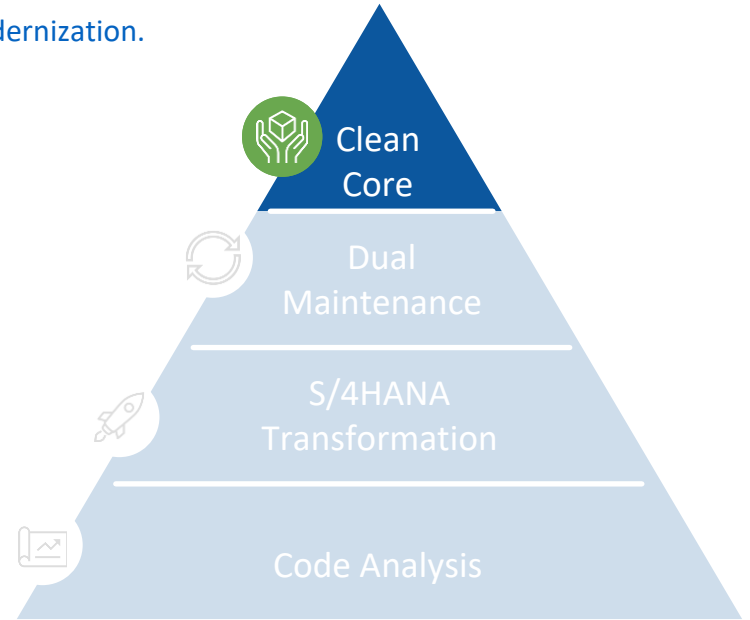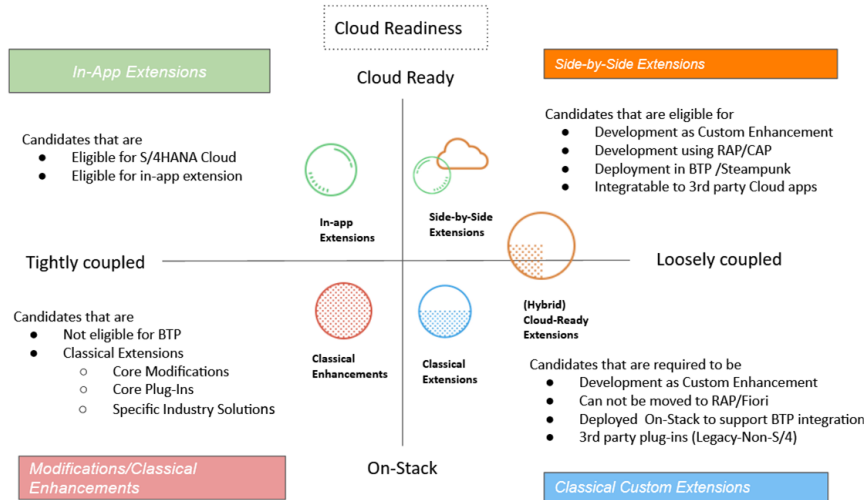
S/4HANA Transformation

Code Analysis

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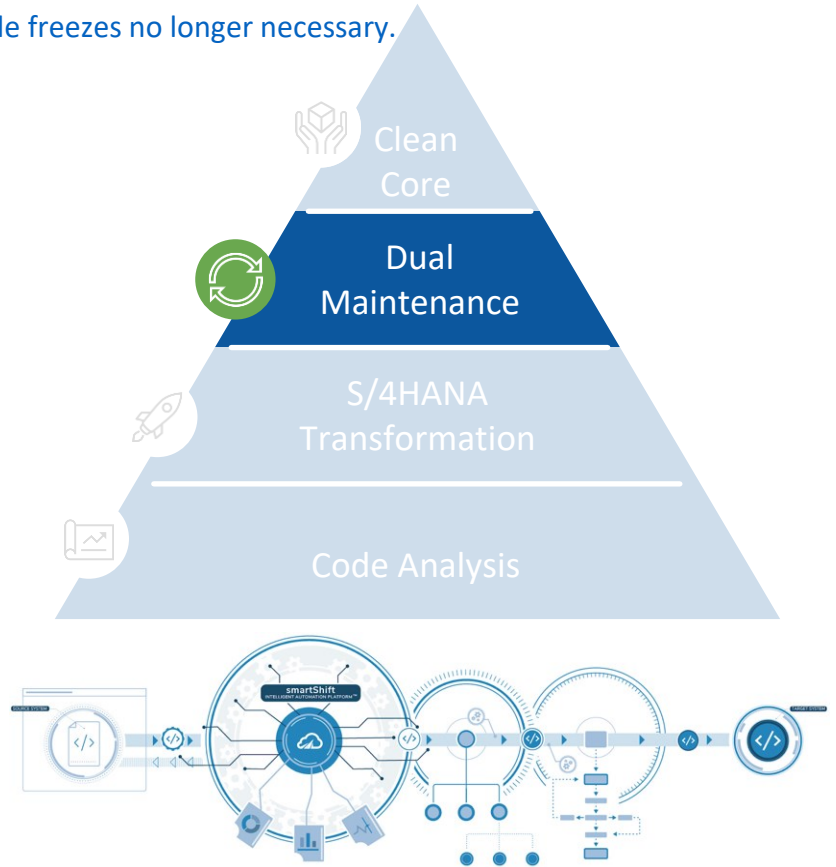
Clean Core Assessment

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

In-App Extensions

Candidates that are
- Eligible for S/4HANA Cloud
- Eligible for in-app extension

Cloud Readiness

Cloud Ready

Side-by-Side Extensions

Candidates that are eligible for
- Development as Custom Enhancement
- Development using RAP/CAP
- Deployment in BTP /Steampunk
- Integratable to 3rd party Cloud apps

In-app Extensions

Side-by-Side Extensions

Tightly coupled

Loosely coupled

Candidates that are
- Not eligible for BTP
- Classical Extensions
  - Core Modifications
  - Core Plug-Ins
  - Specific Industry Solutions

Classical Enhancements

Classical Extensions

(Hybrid) Cloud-Ready Extensions

Candidates that are required to be
- Development as Custom Enhancement
- Can not be moved to RAP/Fiori
- Deployed On-Stack to support BTP integration
- 3rd party plug-ins (Legacy-Non-S/4)

Modifications/Classical Enhancements

On-Stack

Classical Custom Extensions

Clean Core

Dual Maintenance

S/4HANA Transformation

Code Analysis

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smartShift Overview - Global Customers

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

Next Steps

Test drive our analysis capabilities

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