smartShift

Intelligent Automation for SAP Transformations:

How Automation De-Risks Custom Code Modernization

About Me

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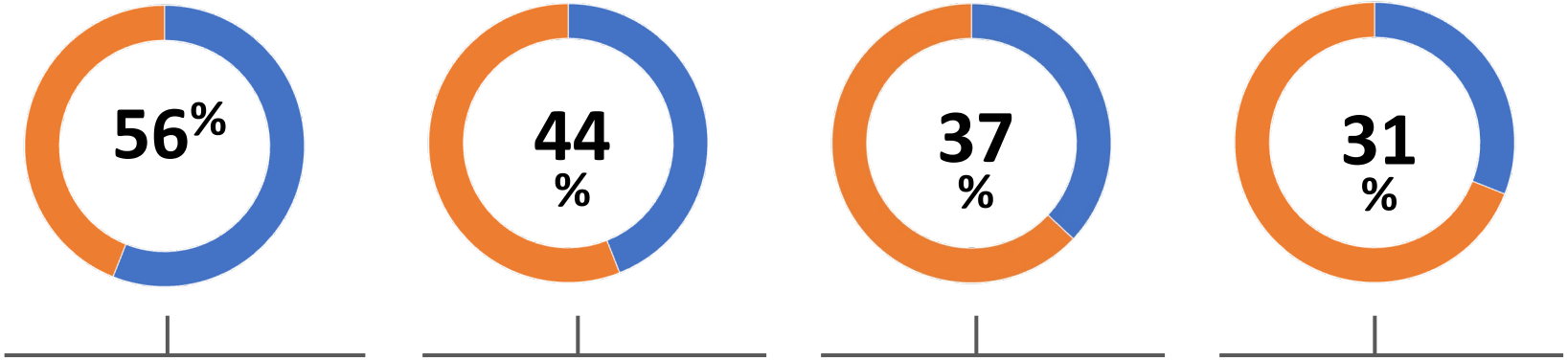
Custom Code is Needed

ASUG Research Findings



Source: smartShift/ASUG Market Research

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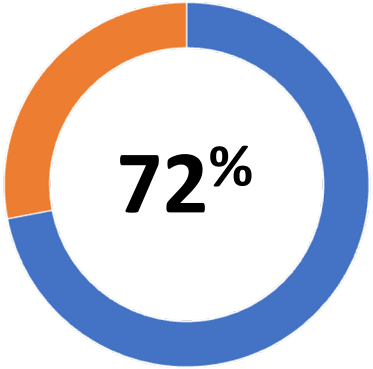
Custom Code Remains Critical

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)

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Custom Code – The Challenge

An “Average*” SAP System

22,000 Custom Objects on average

2.7M Lines of Code on average

40 - 60% custom applications **not used**

9,000 HANA compliance problems on average

17,000 S/4HANA compliance problems on average

Established **15+ years** ago

Up to **2,000 monthly transports**

1,000s of person days **technical debt**

8,000 Security problems on average

15,000 Performance problems on average

Monolithic, tightly coupled applications

*smartShift Benchmark

Hard to maintain, extend

Hard to modernize

Stability problems

Performance problems

Security problems

Slow Innovation

Higher TCO

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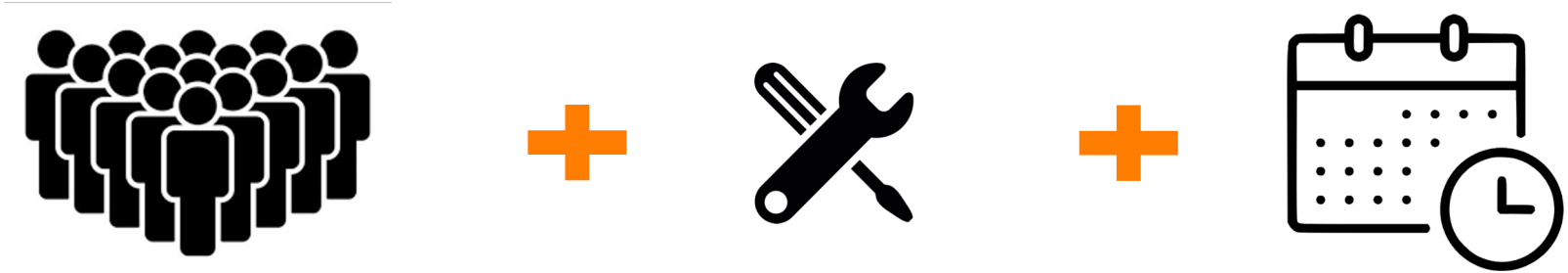
CONVENTIONAL APPROACH TO HANDLING CUSTOM CODE

Manual remediation with tool support is labor-intensive, time-consuming and risky



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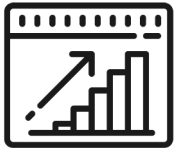
Automation Offers Modernization Options

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**

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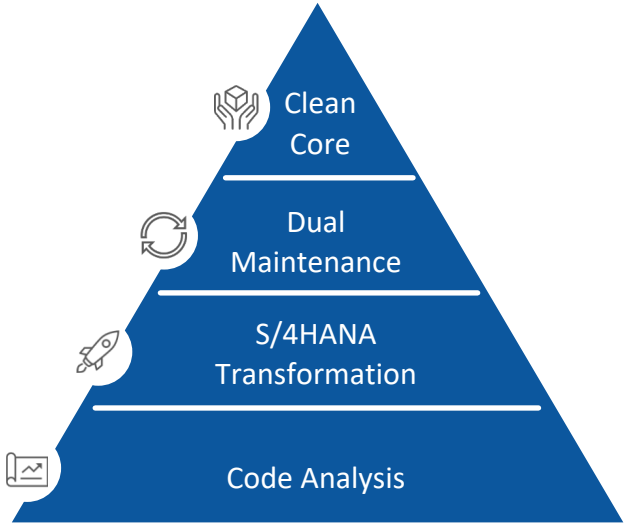
Intelligent Automation®

- 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

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.



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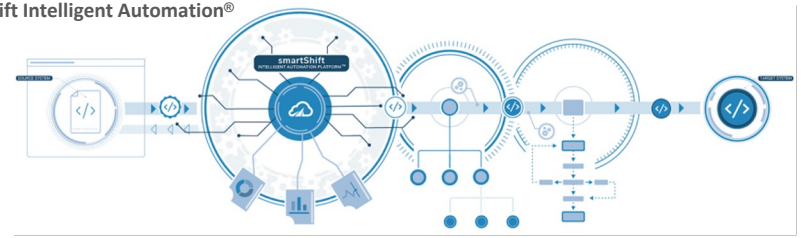
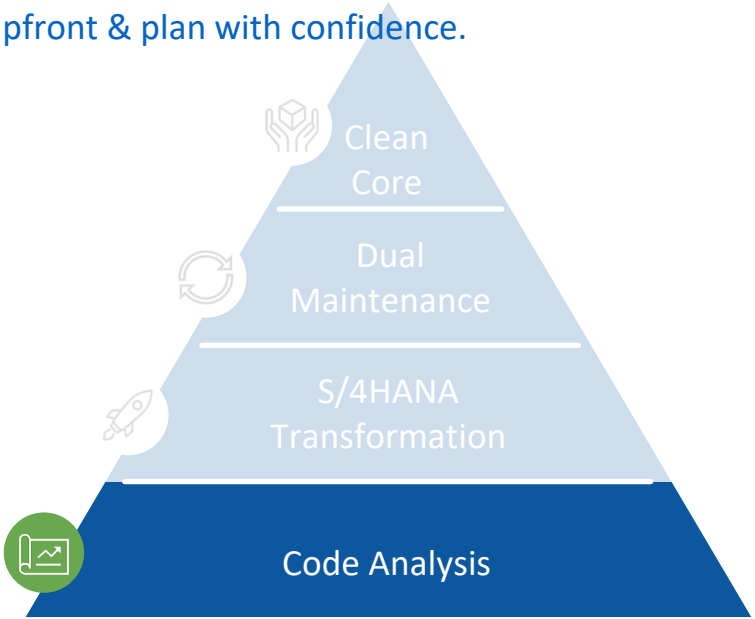
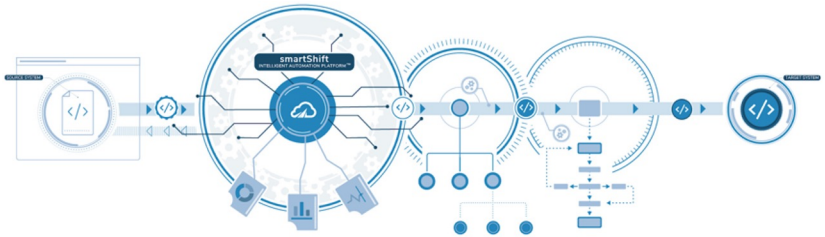


Custom Code Analysis

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





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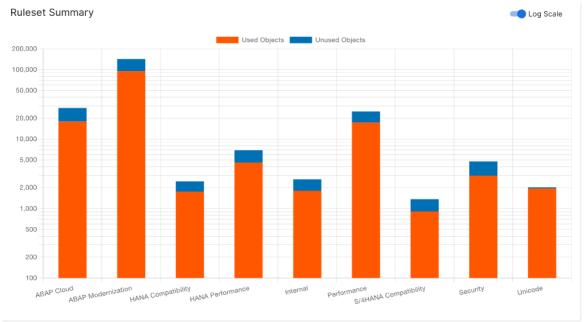
Custom Code Transformation

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

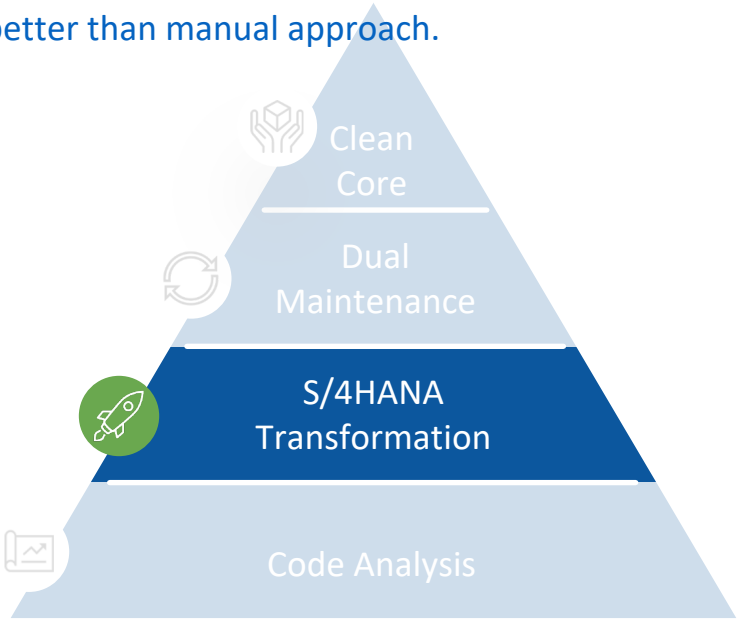
Ruleset Summary

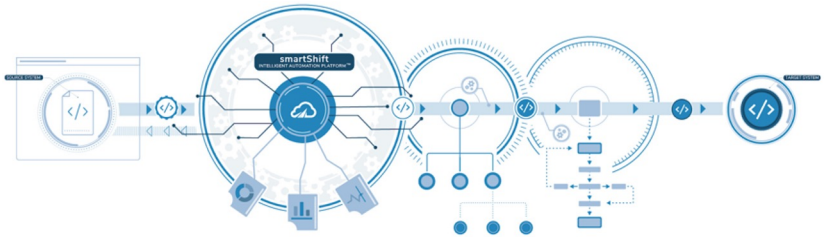
Rule Set	All Objects	Used Objects
ABAP Cloud	28,082	17,906
ABAP Modernization	141,579	94,824
HANA Compatibility	2,463	1,757
HANA Performance	6,910	4,577
Internal	2,635	1,805
Performance	25,035	17,291
S/4HANA Compatibility	1,366	912
Security	4,780	2,974
Unicode	2,023	1,947




```
TABLES : bseg.

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

```
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(             "$smart: 633
  IMPORTING                                                "$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
```





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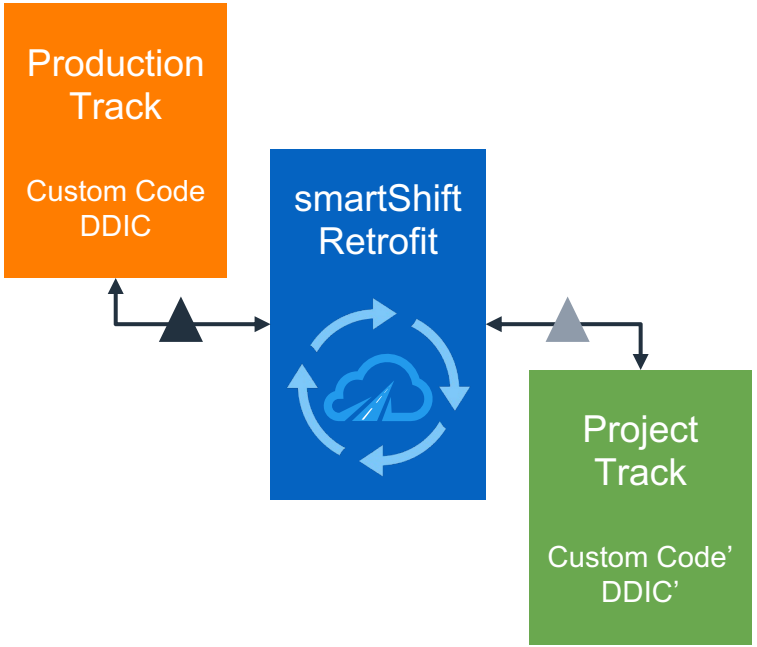
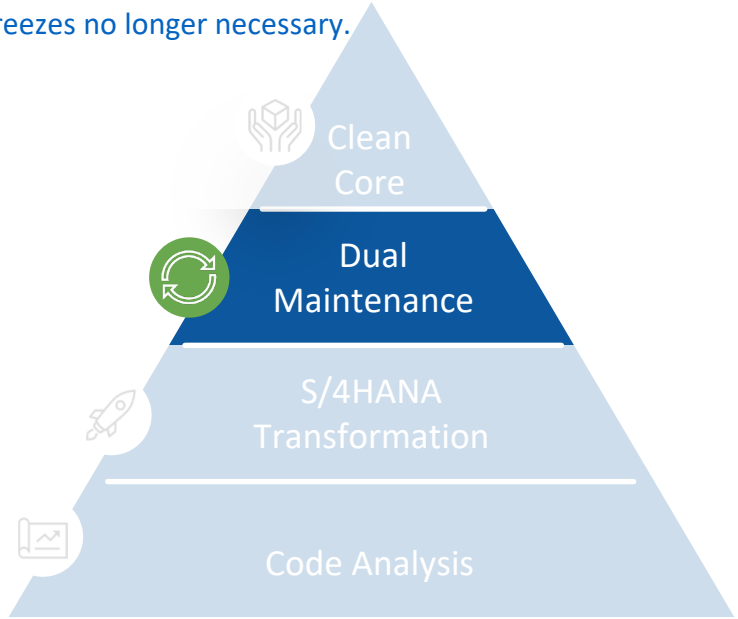
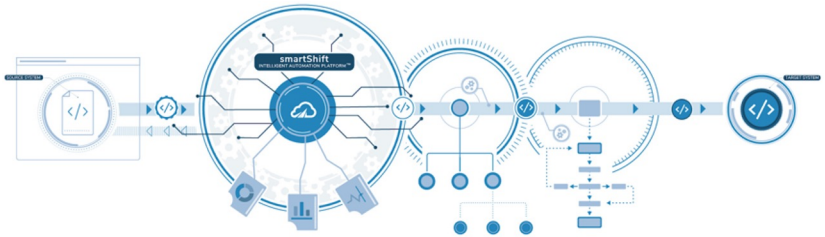
Automated Dual Maintenance

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







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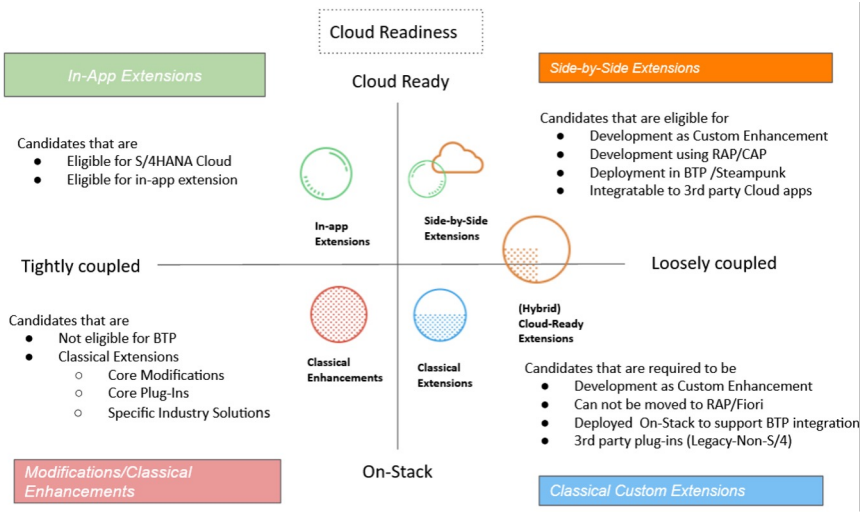
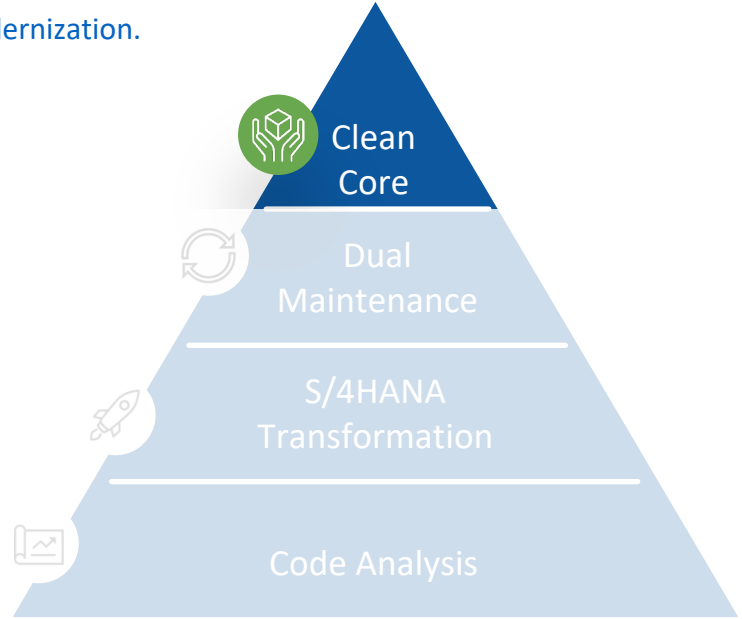
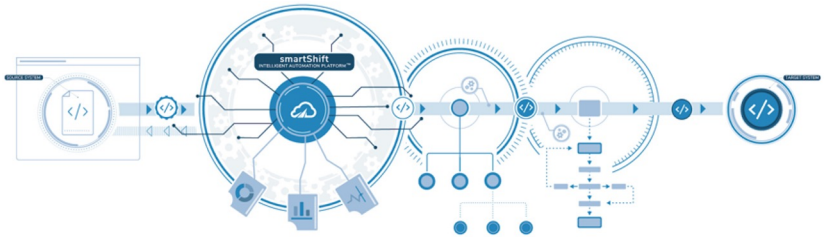
Clean Core Assessment

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







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smartShift Overview - Global Customers

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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

- 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

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Better Together

Test drive our analysis capabilities

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

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