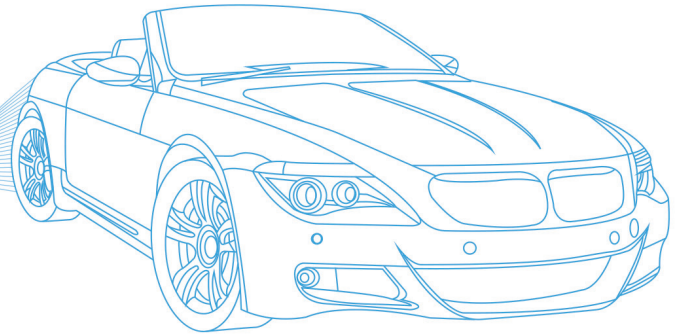


The BMW Group

Automotive



How BMW achieved the impossible: SAP[®] system upgrade, Unicode conversion, and ABAP[®] code optimization in 5 weeks

Highlights

Client - The BMW Group

Project - SAP upgrade
Unicode conversion
ABAP code optimization

Goals

The BMW Group wanted to ensure that its SAP systems were up-to-date and well-equipped to handle all of their business processes. This required the BMW Group to address several transformation projects:

1. Perform a technical upgrade for their HR system, migrating from SAP ECC 5.0 to 6.0 and converting it to Unicode as well
2. Convert the Finance department's ECC 6.0 system to Unicode
3. **Optimize their ABAP code and ensure** compliance with the latest recommended coding standards to achieve better maintainability, stability and performance

Customer Overview

The BMW Group is the world's leading premium manufacturer of automobiles and motorcycles - with its BMW, MINI and Rolls-Royce brands. As a global company, the BMW Group operates 28 production and assembly facilities in 13 countries. The BMW Group has a global sales network in more than 140 countries.

Challenges

Addressing the BMW Group's transformation objectives, including an SAP upgrade, Unicode conversion and ABAP code optimization was not a small project – not to mention the tedious custom code corrections and testing that would follow.

A **manual approach** to these transformation needs would have taken an extensive amount of time and resulted in **lengthy code freezes**. It would have been impractical for the organization to invest the required time, money and resources.

As observed in projects of this magnitude, **enforcing 100% compliance** with SAP and internal coding standards is next to impossible.

The BMW Group was looking for a way to speed up the ABAP code remediation process while improving accuracy and reducing testing time.

What did smartShift Technologies do?

Step 1 - Analysis:

To find the total number of errors and issues in the ABAP code, smartShift performed deep automated analyses. The ability to determine 100% of this information up front provides a major advantage, since it can accurately predict project risks, duration and budget. This data allows smartShift to provide a **fixed time and fixed price** proposal and guarantee engagement outcomes subject to a service-level agreement.

No. of objects handled in...	HR	Finance
Reports	1210	1812
Function Groups	186	334
Module Pools	93	78
Subroutine Pools	56	14
Includes	3652	3416
User Exits	53	46
Class Pools, Class Pool Includes	14311	1805

Benefits

1. However beneficial **code optimization** might be, it is never prioritized because of realistic constraints on human capital, budgets and time. Fortunately with smartShift's automation technology-enabled services, you don't have to pick and choose between your projects. The BMW Group achieved its code optimization, SAP upgrade and Unicode migration objectives – all together – without affecting the project timeline.
2. The BMW Group suffered **minimal code freeze time** as we were able to perform the above transformations in **less than 2 weeks**. Subsequent re-runs captured the latest code development and changes reducing dual maintenance requirements for BMW.
3. The BMW Group achieved **100% compliance** with SAP standards and their internal custom coding best practices improving maintainability and stability of the custom code.

Step 2 – Automated ABAP Code Remediation:

To remediate the ABAP code for all 3 requirements in the same iteration, the BMW Group chose to use automated tools by smartShift. smartShift's tools:

- made the necessary changes in the code syntax to convert the objects to ECC6.0 and Unicode
- replaced obsolete coding syntax and non-recommended coding styles
- modified the coding syntax for better code readability, maintainability and stability
- performed the transformation twice – first on the Sandbox system, then on the development system - saving BMW a lot of code freeze time

Overall, smartShift fixed more than 60,000 code issues and potential runtime-errors in the HR and Finance systems respectively.

4. The BMW Group completed the project in **less than 5 weeks**. Without smartShift's automated tools, the project would have taken about 10-12 months.
5. smartShift's tools successfully addressed tedious and repetitive code corrections. This **freed up valuable time for the BMW Group's ABAP Teams** and enabled them to focus on other aspects of the technical upgrade and more strategic code development.

Contact a smartShift Transformation Consultant Today to Get Your Analysis Started



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