

BMW Group

A premium brand through and through

Case Study

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The BMW Group seeks profitable growth based on its premium-brand strategy. The business processes directly connected with production are therefore regarded as highly important.

The **K-WOM project** was set up to support the highly integrated vehicle process chain (K-WOM stands for "Konzernweites [group-wide] Output Management"). The primary aim was to create a uniform, group-wide output management infrastructure.

The motivation

As early as mid-1999 a decision was made to reduce the network infrastructure costs through migration of the existing SNA network to TCP/IP. Moreover, the group wanted to consolidate its numerous existing output management solutions, including those developed in-house by BMW Group, in order to achieve cost transparency.

A general analysis was begun so as to gain an overview of the solutions in use. Some 40-50 principal applications were considered, as well as the output devices, mainly printers. In almost every application, the problem of output management had been solved on an individual basis. For the different specialist requirements there was no generally valid solution, and a specially customised infrastructure was often needed: usually an SNA network box and a special printer with its own printer language. Changes to peripherals therefore always necessitated changes to the applications, along with extensive programming work. In view of the large number of applications, the different spooling systems and different form layout systems, the costs of operating and maintaining the output

management solutions were far from transparent. And so, in the year 2000, the company gave the go-ahead for the K-WOM project, in order to create a uniform, group-wide output management infrastructure.

General conditions

The "Global Vehicle Distribution System" (GVDS) pilot project focused primarily on support during the transfer from the existing SNA network. The aim was to provide a solution which could print as quickly and reliably via TCP/IP as people were accustomed to from the SNA system. This hurdle was not easy to overcome in the production-related areas. Though they sent many enquiries to various suppliers, the K-WOM project team did not receive any satisfactory proposals for reliable printing via TCP/IP in productive areas.

At this point the company started working with Xerox Global Services as general contractor. In partnership with Xerox, a business concept for an Output Management System (OMS) was formulated. In the specification phase, Macro 4 with its output management solution, Columbus was chosen. Columbus is now the standard infrastructure for the distribution of documents from a wide variety of applications – from the mainframe, in-house solutions or SAP® R/3®. During the first, successful test installation, the system expansions for the future OMS were further specified jointly with Xerox and Macro 4.



OMS specification:

• Availability at every BMW Group production site
• Data transfer via a Java-based interface
• The data structure from the application should be XML
• Document Composition within the OMS
• Volume of 200,000 documents per day at up to 50,000 documents per hour during peak periods in the final expansion phase

Description of the solution

As a reusable solution module, K-WOM now supports projects for the realisation and migration of document-centric business processes within BMW Group:

- Quick and secure printout via TCP/IP from the Open Systems environment – as previously via the SNA network
- Fail-safe (redundant output channels)
- Consolidation of the distributed solutions:
 - Single Point of Administration & Control (for OMS and central printer administration)
 - Central forms management
- Putting the BMW Group's principles of standardisation and innovation into practice
- Use of a standard solution in a modular and individual manner
- Innovation: modular solution design, e.g. for new output channels or integration of new platforms

By mid-2002, K-WOM had established itself as the standard within the BMW Group for different projects. From development, ordering, financing and supplier requests, through manufacturing, production and distribution (worldwide), to after-sales service, K-WOM supports essential processes within the divisions of the BMW Group. Acceptance within the BMW Group increased with the number of successfully implemented projects. In July 2002 another K-WOM pilot installation began, this time in the context of a logistics project. Successful implementation has resulted in a complete transaction sequence, starting with printing of the order from within SAP® R/3® and ending with feedback to the SAP® R/3® system reporting successful printing. In view of the positive results of the pilots, the project team decided to use K-WOM as the output management infrastructure. BMW Financial Services also chose K-WOM as the underlying infrastructure for document-centric business processes.

K-WOM in the BMW Group Blueprint

The Output Management System is now the information hub for all document-centric business processes with regard to distribution and diversion, control, monitoring and security.

K-WOM has created significant added value for BMW Group. This underlines the need for this business case.

Business Case

- **Security of the process chain**
 - Monitoring the document flow as far as the output device
 - Automatic rerouting to alternative output channel in case of error
 - Central monitoring of components
- **Standardisation of network infrastructure and of the spooling systems used**
 - Reducing the effort for administration, operation and standby services
- **Reducing costs through a Single Point of Administration & Control**
 - Simplified problem and error analysis
 - Synergy effects, e.g. in standby service
- **Standardisation of printer infrastructure**
 - Lower purchase costs
 - Lower maintenance costs
 - Forming a basis for the same infrastructure in the office environment as in production

The next generation

Together with its partners Xerox and Macro 4, BMW is working on K-WOM follow-on projects aimed at further optimising potential along the value-added chain.

The use of a central device management system for cross-platform (mainframe, UNIX, SAP® Solutions and Microsoft) and consistent configuration of all printers and their drivers optimises resources within Administration, Support and Operation, thereby saving time and money.

The company is also working on further consolidation projects, optimisation of the link to the BMW Print Centre and a standardised "output package" for branch establishments...

For the Central IT Services project team, the work never ends.

Business Information Logistics – Managing information logistics for document-centric business processes !

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Further information / Contact details

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