

FIELD-TESTED INTERFACES FOR SYSTEM INTEGRATION

Well connected: The BrandMaker Integration Framework connects the Marketing Efficiency Cloud with your company's IT

Today, the interlinking and integration of processes and systems are ubiquitous challenges in the daily operations of companies. This not only concerns technical systems, but also the cooperation between internal divisions and external partners. The ever increasing number of IT solutions used, and the fact that information must be exchanged between them as seamlessly as possible mean that the requirements for software solutions have significantly changed. This also applies for the increased use of Marketing Technology, which can help companies to plan, manage, and control the entire marketing process more efficiently. Marketing Technology must be integrated into the existing IT landscape so that it does not just co-exist as an isolated data silo. The BrandMaker Marketing Efficiency Cloud provides field-tested interfaces to connect it to other business applications, such as the ERP or CRM systems used throughout a company.

TYPICAL INTEGRATION SCENARIOS

The integration of Marketing Technology in a complex IT environment is a task that affects not only large companies, but often medium-sized companies as well. Typically, there is one leading system in the IT landscape, in which significant information is saved, and one or several other target systems that need and process this information.

Some typical examples from practical applications show how individual modules of the Marketing Efficiency Cloud can be used and linked with other IT solutions:

- Orders appear in the BrandMaker **Marketing Shop** that are carried out by external service providers. The relevant data then has to be automatically transferred to the systems for production and order processing that are used there.
- As the central repository, current product photos and campaign visuals that should be used on internal and external websites in the Content Management System of a third party are stored in the BrandMaker **Media Pool**.

- Marketing relevant data from the technical Product Information System (PIM) must be mirrored in the BrandMaker **Marketing PIM** and must be enriched there with advertising texts, images, channel specific information, etc. This is necessary because the technical PIM is not suitable or not organizationally designed to do this.
- The strategic planning of all marketing activities is carried out in the BrandMaker **Marketing Planner**, but the budgets and the incoming invoices are in the ERP system. The current budget data must be transferred and must be available in the Marketing Planner.

The solutions that BrandMaker use for these types of scenarios that have different leading systems, target systems, and target groups are always the same: Standardized interfaces for system integration and their appropriate utilization.

BRANDMAKER INTEGRATION FRAMEWORK

Thanks to the modular structure of the Marketing Efficiency Cloud, BrandMaker can supply a Marketing Resource Management (MRM) system equipped for any Marketing application scenario – "all-in-one" and "end-to-end". BrandMaker has several field-tested standard interfaces for the individual modules of the Marketing Efficiency Cloud.

INFRASTRUCTURE

BrandMaker provides its MRM solution, which is recognized as a leading solution by analysts, in the SaaS model (Software as a Service). SaaS refers to the concept of purchasing and using software or infrastructure as a service instead of creating and operating it yourself. The SaaS solutions from BrandMaker meet privacy requirements by operating in a data center in Germany that is certified according to the international standard for information security (ISO 27001). Furthermore, the BrandMaker Marketing Efficiency Cloud is based on Java, which provides the ideal environment for stable enterprise applications. The use of cryptographically secured transmission paths, such as HTTPS connections, enables modern and global system integration via web services.

- The quality of the infrastructure
- The suitability of an interface standard for specific tasks
- The experience of the team with regard to the successful implementation of system integrations

The decision for an interface architecture also depends on how often data has to be exchanged. A minute-by-minute system coupling, for example, requires a live interface via a web service that immediately confirms the results. If data should only be moved once a day or even only once a week, then a batch interface with periodic file transfer and asynchronous processing may be more efficient. It is even possible to set up a manual call when new data is entered if this approach is more useful than an automated, periodic matching.

The time interval for the data exchange can also influence the selection in another way: As a rule, a live interface via a web service delivers the required data to the end users more quickly. However, the troubleshooting can take longer if the data is unavailable. A complete data exchange is simpler and, if there is a fault, more robust than delta matching, during which only new data is transferred. A further argument for a complete data exchange is that the total data stock remains consistent. However, the data quantity to be transferred is substantially larger. Depending on the scope of the accrued data, this can be another reason not to use this approach. One thing, however, does not change: A complete data exchange must take place once for the initial import into the target system.

The most important decision that must be taken when drafting a system coupling is the definition of the leading system. This stops data from being edited in both the source and the target system. Therefore, the data remains consistent. Depending on the intended purpose, specific data from the leading system can be enriched with further information in the target system. For example, a technical PIM system can be the leading system for all product information. As the target system, a data record can then be updated or enriched with additional marketing related information (advertising texts, images, etc.) without a problem in the BrandMaker Marketing PIM.

There are therefore many paths that lead to the goal of system integration. Ideally, you work out which interface technology is finally the best in a workshop. There, everyone involved in the integration project can bring together common points, such as one-off costs, maintenance costs, the speed of implementation, the speed of the data transfer, data quantity, etc., and can then find the best possible solution for the professional, specific task at hand.

INTERFACE TECHNOLOGY

All of the interface technologies used by BrandMaker communicate via web interfaces. The application logic is realized on the BrandMaker server.

SOAP (Simple Object Access Protocol):

SOAP is used to exchange data over a network. The modules Marketing PIM, Job Manager, Marketing Planner, and Media Pool can be contacted via SOAP.

REST (Representational State Transfer):

The REST protocol is used for the communication between web applications. The administration area can be contacted via REST.

SFTP (Secure File Transfer Protocol):

Via the SFTP protocol, files can be transferred between a client and a server in an encrypted way. The Marketing Shop can be contacted via SFTP.

Specific module functions:

The individual modules of the Marketing Efficiency Cloud provide various functions to exchange data, such as the uploading and reading of relevant, processed data using an Excel file.

INTERFACE TECHNOLOGIES – WHAT TO KEEP IN MIND

Some fundamental decisions must be made when selecting the interface architecture. Not only technical, but also specialist aspects play important roles:

MANY FUNCTIONS OF THE MARKETING EFFICIENCY CLOUD CAN BE CALLED VIA AN INTERFACE

Administration

- **API Users:** Check/create/change and to some extent delete users, user groups, roles, organizational units, virtual databases, and virtual database groups (REST interface)
- **API Theme Tree:** Maintain (create, edit) theme trees (SOAP interface)
- **API Fonts:** Check character sets and fonts (SOAP interface)

Media Pool

- **API Assets:** Check/create/change media assets including metadata, uploads and downloads as a single request or stream, and the version of the media assets (SOAP interface)
- **API Preview:** Check preview images in various sizes (URL interface)

Web-to-Publish

- **API Documents:** Create/update/render/download template based documents (SOAP interface)
- **API Mass Personalization:** Simple mass personalization of documents (SOAP interface)

- **API Embedded OCI:** Use of Web-to-Publish as the WYSIWYG document generation in order processes (SOAP/OCI interface)

Marketing Planner

- **API Planner:** Check/create/change/delete planning elements, budget data, invoices, dimensions, and other metadata (SOAP interface)

Job Manager, Marketing PIM

- **API DSE:** Check/create/change/delete datasheets (SOAP interface)

Marketing Shop

- **API Shop:** Exchange orders with suppliers, upload catalog information, transfer order status (SFTP protocol, XML interface)
- **API Shopping Cart items:** Check contents of the shopping cart, search for shop items (SOAP interface)

Review Manager

- **API Review:** Create/change reviews (SOAP interface)

FIELD-TESTED APPLICATION EXAMPLES

The Marketing Efficiency Cloud supports various interface technologies to be able to connect to other systems. The customer-specific integration solutions that are realized on the basis of the BrandMaker Integration Framework are as equally diverse. However, the following examples all have one thing in common: They are based on a solid infrastructure and are best tested in practical use.

SERVER BASED MASS IMPORT INCLUDING METADATA

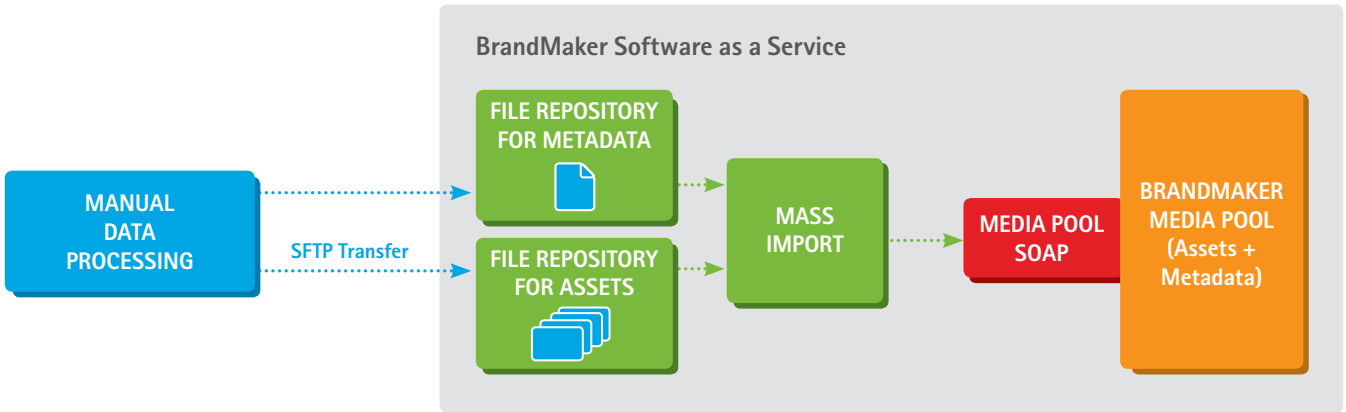
When a Digital Asset Management System, such as the BrandMaker Media Pool, is filled for the first time, terabytes of data can quickly pile up. The Media Pool does provide several comfortable functions for mass import via the user interface. However, a server based mass import is much more sufficient way of importing several thousand media assets with their metadata.

BrandMaker developed a solution for this scenario that helped several customers (from the automotive, financial, insurance, and materials management sectors) to import extensive stocks of assets when they filled the Media Pool for the first time. It consists of the following components:

- **File upload of media assets:** The Media Pool is filled and preview images are automatically generated. The derivable metadata, such as dimensions and file sizes, is saved.
- **Metadata upload:** The metadata is uploaded as a CSV file and automatically assigned to the media assets that have already been imported. The metadata can be assigned based on the file name, an asset ID, or the unique MD5 hash.

The customer can also automatically execute this solution at certain periods by individually modifying the initial import to transfer newly supplied media assets at defined times, for example. The customized use can be defined for each customer.

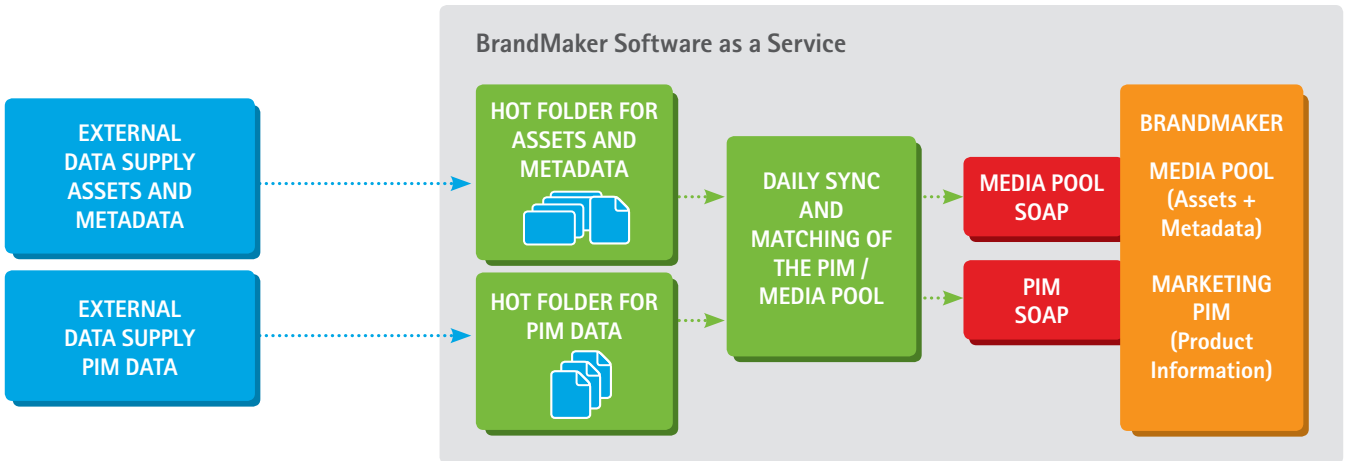
- Customer / Source
- Integration Component
- BrandMaker Standard System
- BrandMaker Interface in the Standard System



IMPORTING PRODUCT INFORMATION AND MEDIA ASSETS FROM VARIOUS SOURCE SYSTEMS

Around 2,000 regional dealers of an electronic retailer group should use a Marketing Portal to select their marketing materials from over 1,000 designs and individually adapt them online. All of the information they need for this, such as the product name, description, label, logos, product properties, or photos, are provided consistently and used in the templates in line with CD requirements.

For this scenario, BrandMaker has developed a solution that transfers the product information relevant for the production of advertising materials into the BrandMaker Marketing PIM from two different source systems, loads related images into the Media Pool, and makes them available in the Web-to-Publish module.



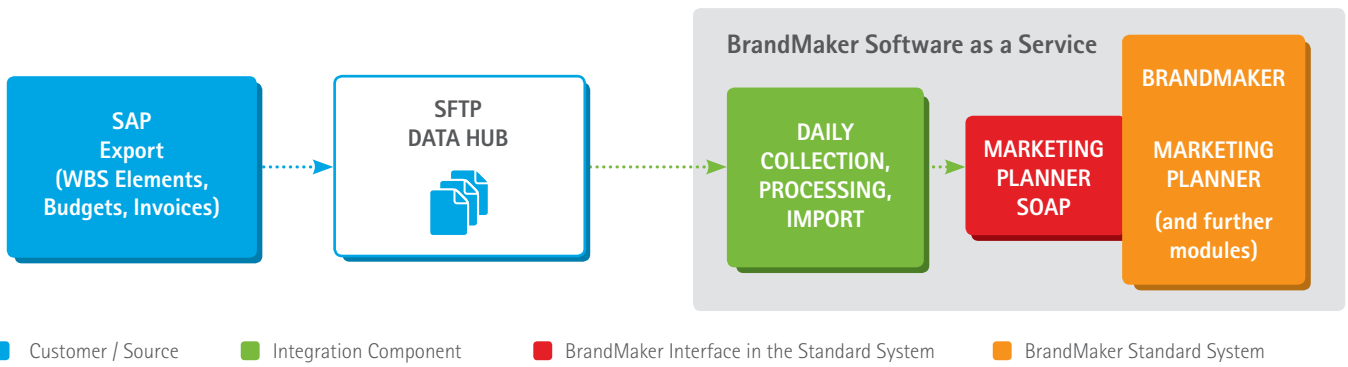
- Customer / Source
- Integration Component
- BrandMaker Interface in the Standard System
- BrandMaker Standard System

SAP INTEGRATION INCLUDING STRUCTURE MATCHING

An energy supplier uses the BrandMaker Brand Management Portal to centrally communicate all information about brands and the corporate design. A component of the Marketing Portal is the Marketing Planner, in which marketing activities are consolidated and presented across the group. The budget data from the leading ERP system from SAP should also be available.

activities, budgets, and actual costs. The data is automatically added to the relevant planning elements via a CSV import. Newly created objects in the SAP system are automatically created in the Marketing Planner during the import. This means that current information on the budgets for evaluations, controlling, and strategic decisions is directly available in the Marketing Planner.

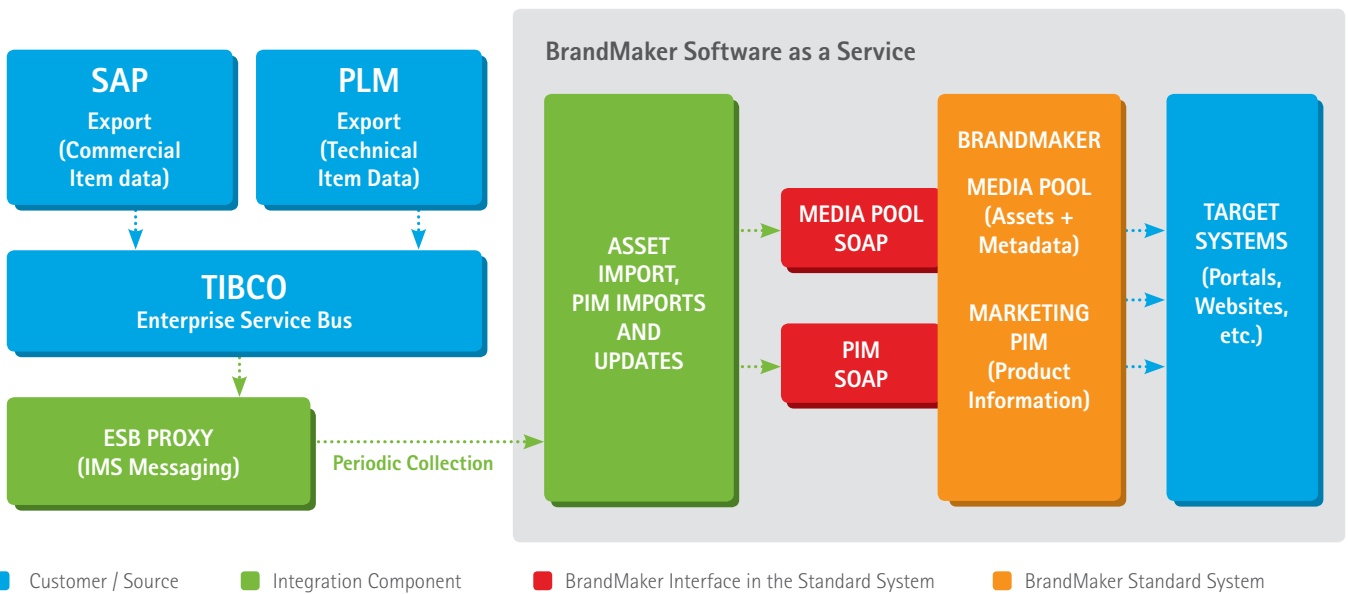
For this scenario, BrandMaker developed a solution that provides the Marketing Planner with relevant information, such as the names of the



CONSISTENT COMMUNICATION ON ALL CHANNELS

An automotive supplier wants to bring together data from the Product Lifecycle Management and commercial item data from SAP in the Marketing Efficiency Cloud. Then the data should be enriched with further marketing relevant information to be able to consistently supply all communication channels, such as the customer portal, via the Marketing Efficiency Cloud.

BrandMaker has developed a solution for this scenario which can be used to make the required data available in the Marketing Efficiency Cloud using a TIBCO enterprise service bus and a proxy component. The relevant media assets are automatically imported into the Media Pool, and the corresponding objects are created or updated in the Marketing PIM.

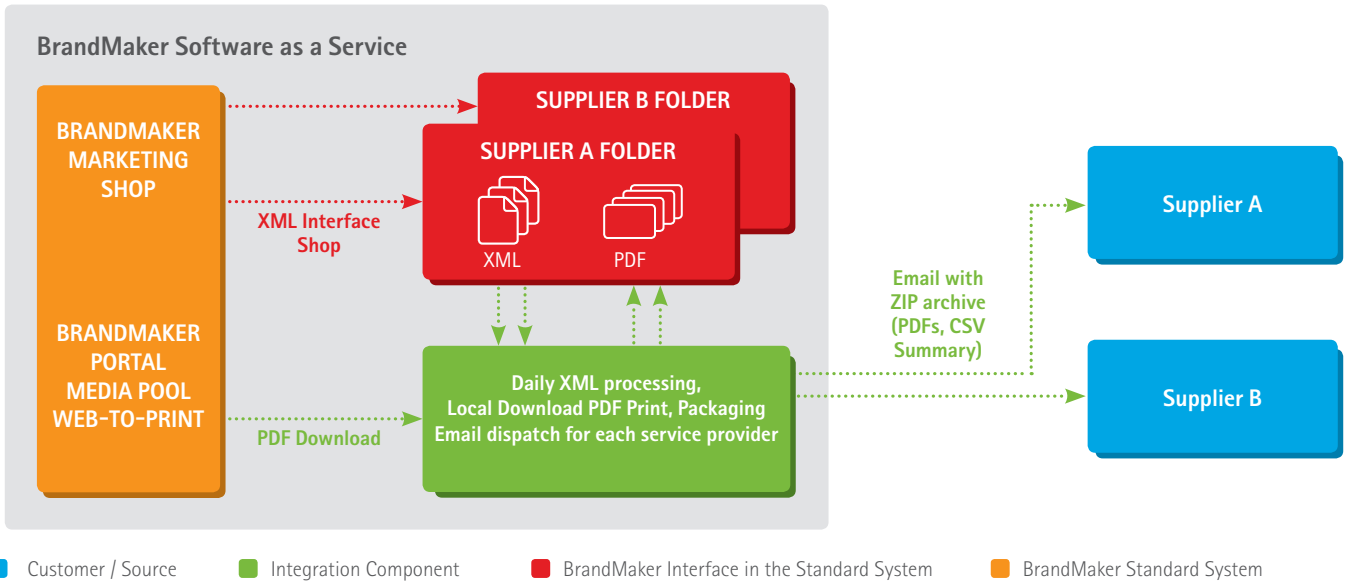


ALL PRINT DATA PROCESSED SUITABLE FOR SERVICE PROVIDERS

A large German bank would like to add an option to make personalized office and branch equipment centrally available on their Brand Portal based on BrandMaker software. Using the order center, it should be possible to order high volume items such as business cards with QR codes or writing pads in addition to materials with a very low order volume, such as labels listing the opening times of branches.

service providers. To do this, the information on the stock that was ordered via the Marketing Shop and created using Web-to-Publish is read using an XML file. It is then transferred to the relevant service providers together with the printing data (PDFs) via email. The service providers comfortably receive all product-relevant information without having to build a specialist IT infrastructure.

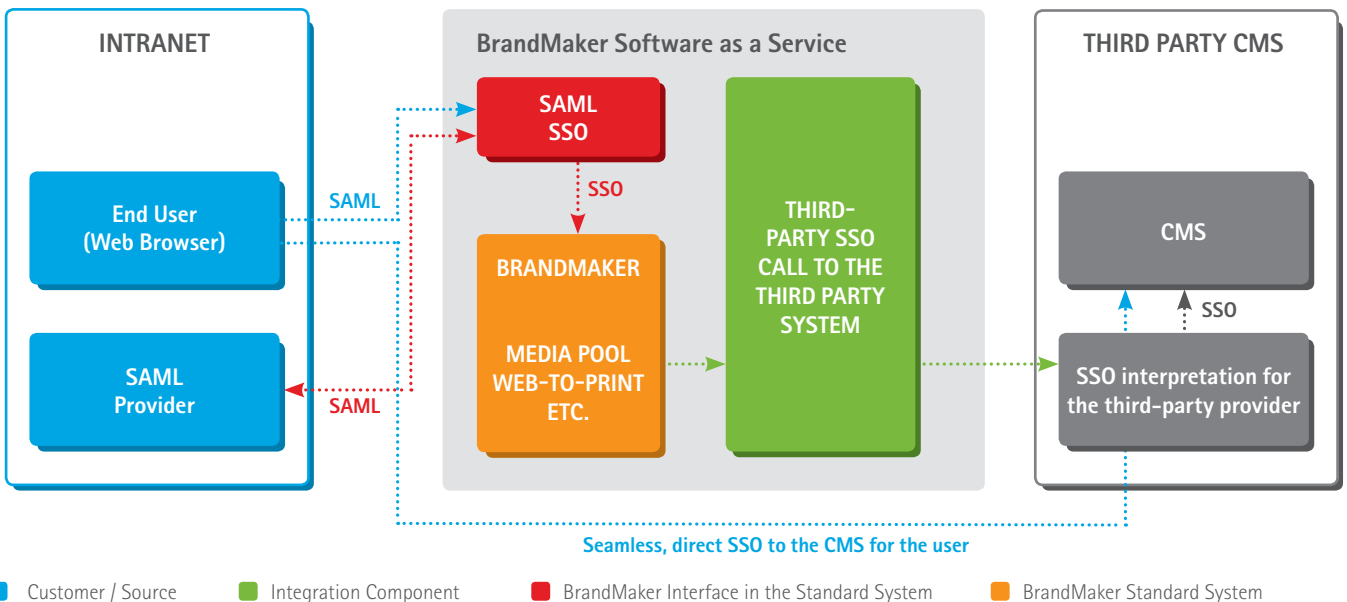
BrandMaker has developed a solution for this scenario that helps to efficiently transfer the many hundreds of orders each day to various print



SINGLE SIGN-ON INTEGRATION WITH A CONTENT MANAGEMENT SYSTEM

The Media Pool and Web-to-Publish modules from BrandMaker are the main components of a company-wide Brand Management Portal at a global life-science group. However, a Content Management System (CMS) from a third-party provider is also integrated into the portal. To enable more than 70,000 global users to use the portal in a seamless and uncomplicated way, the CMS should be dynamically integrated into the Brand Management Portal.

BrandMaker has developed a solution for this scenario which can be used to automatically sign users into the system via Single Sign-On (SSO). In addition to the user name, roles and rights from the intranet are also passed on to the interlinked systems. New users in the Brand Management Portal are automatically created in the CMS. This enables a seamless user experience when using the systems that are technically independent of each other.



CONCLUSION

From the diverse range of customer-specific requirements, BrandMaker has created a genuine and above all field-tested interface assembly kit that contains the right solutions for the most varied scenarios. These interfaces can be used by the BrandMaker system integration team, the customer's own IT department, or service providers to set up appropriate

system couplings. The fully integrable Marketing Technology from BrandMaker creates genuine added value for the customer through structured, consolidated, and above all accessible and available data.

ABOUT BRANDMAKER

BrandMaker is the leading provider of Marketing Resource Management (MRM) systems. Established in 1999, the company develops and markets sophisticated software solutions for the marketing communication of medium-sized and larger organizations.



Marketing Resource Management covers every stage in the marketing process. BrandMaker's Marketing Efficiency Cloud provides an all-in-one, end-to-end solution for the entire process. It includes modules for Brand Management, Marketing Planning and Campaign Management, Digital Asset Management, Dynamic Content Creation, Advertising Logistics, Advertising Performance Reviews and Local Area Marketing. It is supplied as Software as a Service (SaaS).

The Marketing Efficiency Cloud is tailored to marketing's specific requirements. It guarantees more consistency in Brand Management, more efficiency in Marketing Operations, and more transparency with respect to the results achieved.

Many well-known companies use BrandMaker solutions including Audi, Bayer, Ernst & Young, Hewlett Packard, Humana, Kyocera, Maybank, Roche and UBS.

A global partner network, branch offices in various European countries, and BrandMaker Inc., which is headquartered in Atlanta, Georgia, support BrandMaker's international customers.



www.brandmaker.com

BrandMaker GmbH
Rüppurrer Straße 1
76137 Karlsruhe, Germany
Telephone: +49 721 2012 519-40
info@brandmaker.com

BrandMaker, Inc.
5185 Peachtree Parkway, Suite 280
Peachtree Corners GA 30092, USA
Phone: +1 678 735 7363
info@brandmaker.com

BrandMaker UK
20 Orange Street
WC2H 7EF London, UK
Phone: +44 207 389 0854
info@brandmaker.com

BrandMaker Poland
ul. Młodzieńcza 3
03-655 Warszawa, Poland
Telefon: +48 22 266 01 59
info@brandmaker.com