



The connection of the Migros Quality Information System (»QIM«) to the GS1 GDSN via the BAYARD ContentHub b-integrated



THE CUSTOMER

MIGROS

Migros, founded in 1925 by Gottlieb Duttweiler in Zurich, is one of the largest retailers in Switzerland.

Migros is made up of various cooperatives, stock corporations and foundations, collectively referred to as the »Migros Gemeinschaft«. The Group is represented externally by the Zurich-based Migros-Genossenschafts-Bund (MGB).

Migros includes, among others, the online retailer LeShop.ch, the third largest Swiss retailer Denner, since 2015 the Tegut supermarkets in Germany and various Swiss specialty stores such as DO+IT Garden DIY stores, meltronics consumer electronics stores, micasa furniture stores, SportXX sporting goods stores and others.

THE PROJECT BACKGROUND

Migros uses Informatica P360 as a PIM system for the management of comprehensive product and quality information (»QIM«) for products in the Migros range.



Migros has a large number of own brands in its product range. A large amount of information for these products, such as specifications, nutritional facts, ingredients, allergens, mandatory information, etc., is entered manually by the suppliers via the PIM system's supplier portal. In addition, however, equally extensive data on branded products must be recorded and managed in the system. Since the manufacturers of these branded products in most cases already record this data in their own systems and send it to data recipients via the GS1 GDSN or other platforms, such as Trustbox or Data NatuRe, the challenge for Migros was to implement interfaces to these platforms.

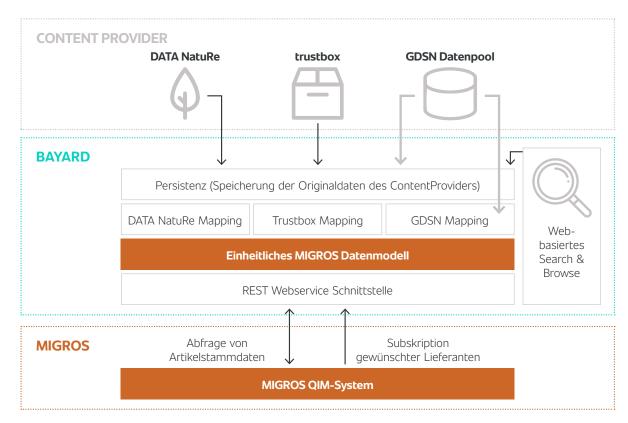
With the ContentHub b-integrated, BAYARD operates a cloud-based service that maps and converts data formats from various content providers into the desired data formats of the connected target systems and standardizes various data transport mechanisms of the data suppliers in a REST web service interface.



THE PROJECT AND ITS CHALLENGES

At the beginning of 2019, two content providers were successfully connected to the Migros PIM system via the BAYARD ContentHub b-integrated:

- 1) DataNaturRe, a cooperative society which operates a product master data pool exclusively for the natural food, natural products and health food industry. And
- 2) trustbox, a platform of GS1 Switzerland, for the exchange of trustworthy, up-to-date and complete product information in Switzerland.



At the end of the year, the GS1 GDSN (Global Data Synchronisation Network) was to be connected in order to provide Migros with access to the data of the manufacturers who upload their data to the GS1 GDSN and synchronize it with data recipients. The GS1 GDSN is the world's largest network for the exchange of product information with a focus on the FMCG industry.

Based on GS1 standards, it allows access to **32,9 Millionen GTINs** at the date of writing this success story and has **57,957 subscribers**, including more than **2,513 data recipients** connected to the **45 interacting data pools** worldwide.



BACKGROUND



- > GS1 GDSN connection to existing interface of the Migros QIM system
- > Informatica P360 in use as PIM system
- > Ambitious project schedule
- > Professional and technical PIM and GS1 GDSN know-how required

THE PROJECT AND ITS CHALLENGES

The challenges for connecting different content is no longer any dependence on the transfer providers have several levels: rhythm and scope of the data sources. There

On the one hand, there is the technical aspect:

The captured products differ in their data models, the identification of the products differs from one another, but also the further development of the platforms, according to the requirements of their users, follows different time and content paths.

On the other hand there are the technical aspects: How do the technical data models look like? Which attribute types are used and how? In which format is the data provided, via which transport route? How often?

BAYARD offers the required background and components for this project from one source:

Professional and technical PIM and GS1 GDSN know-how and experience from a multitude of projects in this environment, Informatica P360 product know-how in conception and technical implementation, and with b-integrated a flexible, cloud-based mapping, transformation and integration platform for product information.

The ContentHub b-integrated from BAYARD solves the challenges of connecting different content providers for the data recipient:

The data model and data format are defined according to specifications of the data recipient, the data query or data transport is provided in the form of an easy-to-use REST web service API. All data of the connected content providers are temporarily stored in a database, so that there

is no longer any dependence on the transfer rhythm and scope of the data sources. There is also no need to request new data from the ContentProvider if you want to connect another system and fill it initially.

Specifically, in the project for connecting the Migros QIM system, the technical mapping of the GS1 GDSN data model to the data model of the QIM system was developed in cooperation with the Migros PIM support team. An XML structure is generated as the technical data format, which can be requested via the REST web service interface and is already used in the same form for the DataNature and trust box product data.

In contrast to DataNatuRe and Trustbox, the data from the GS1 GDSN is received and persisted by the content aggregation platform in a continuous data stream. This enables the Migros system to query the received GS1 GDSN product data via the REST web service interface at any time and thus to receive initial product data or updates for existing products.



CHALLENGES

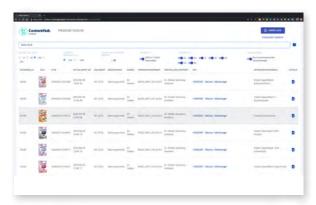
- > Connection of GS1 GDSN data pool to Informatica P360 via the ContentHub b-integrated
- > Technical analysis of the GS1 GDSN requirements and implementation of the mapping for the Migros QIM system
- > Standardisation of the data model, data format and the technical interface to Migros

PROJECT RESULTS AND EXPERIENCES

Migros was able to keep to its tight schedule and since the end of March 2020 Migros has regularly been able to transfer product data from the GS1 GDSN to the Migros QIM system via the REST web service interface of the Content-Aggregation platform. In addition to the technical interface working purely in the background, the Content-Hub b-integrated also allows the Migros PIM support team to conduct web-based research in the product data of all connected content providers. All received product data are indexed via ElasticSearch, so that powerful and high-performance queries are possible in the extensive database.

While the technical connections and formats for the BAYARD ContentHub b-integrated development team are implemented with a good routine, the challenges of such projects always depend on the technical details of the data model mappings.

Therefore, professional and technical GS1 GDSN and PIM expertise is essential, as well as the close cooperation with know-how carriers at the customer, as just as focus on the problem definition and solution orientation - a critical success factor for such a project. And last but not least, close cooperation between the project teams that develop the platforms and the overall architectural overview is important to ensure that the product data, which has its starting point in the ContentProvider system, is transferred via the ContentHub b-integrated to the consuming QIM system with the correct content.





MINIMAL IMPLEMENTATION EFFORT THROUGH REUSE

»The ContentHub b-integrated helps to implement the connection to ContentProviders in a short time and to minimize implementation efforts by reusing the uniform interface.«

Andreas Gerig | Head of PIM Consulting & Projects | Migros-Genossenschafts-Bund

