



QLIKTAG



Product Content Management

Standards Driven Data Models

► A white paper by
Qliktag Software Inc.

► Published
06/13/2017

The Right Approach to Product Content Management

An Overview

With the omni-channel retail environment being disrupted by technology, changes in consumer behavior and being increasingly driven by data, master data management and product content have turned into key focus areas for the consumer retail industry. While most retail organizations manage product content, digital assets and other product related data in a distributed way across various departments or locations within the organization, the new omni-channel landscape demands a more centralized, robust and forward looking approach to product content management. With this, comes some critical decisions to make like: what solutions to leverage? What kind of technologies are ideal to scale? What data formats need to be supported? What kind of processes need to be built around the initiative and what kind of a data model will form the foundation of the entire effort right from the onset.

“While traditional PIM systems offer the flexibility of being able to build your own data model from the ground up and define your own structures and attributes, flexibility is a double edged sword.”



The Challenge

Selecting the right platform and having the right data model is often easier said than done especially if a holistic view of product data flow and usage is considered. Often, the initiative to setup a PIM system or Product Information Management solution is taken up within a specific function or department of the organization. For example, Marketing may decide a DAM / Digital Asset Management tool is the ideal solution to manage product images and documents. They may turn to setting up a PIM with marketing specific product attributes that are relevant to marketing such as consumer marketing descriptions, marketing claims and ignore non-marketing related attributes. The R&D department may develop a data model based on ingredients, composition, ingredient origin and attributes relevant to the R&D organization. While traditional PIM systems offer the flexibility of being able to build your own data model from the ground up and define your own structures and attributes, flexibility is a double edged sword. The data model adopted for the final product content management initiative maybe comprehensive, robust, perfectly structured for one purpose / business case / channel for consumption of data and yet completely incompatible with another system / use case or entity within the omni-channel retail ecosystem.

Strategic Approach to Product Content Data Models

The Solution

Selecting or building a forward-looking product content platform on the foundation of GS1 Standards based data models can help structure the overall product data initiative on an ideal base. Global standards based product data models come offer cross platform data compatibility which in an interconnected digitally driven business environment is a significant vantage point. It makes bringing in data from GS1 standards based sources such as GDSN or third party data pools into your system simpler. It also makes publishing data to other standards based systems simpler whether it needs to be distributed to another system within the organization, a supplier, a third party organization, digital application or any other recipient. With some of the largest players in e-commerce like Amazon and Alibaba also beginning to working closely with GS1 standards, these global data models will help organizations connect seamlessly to the much larger retail data ecosystem that is already changing the business landscape today.

Does this mean a GS1 standards based product data model is better than having a custom defined data model like traditional PIM system offer? Not at all. It is however, the ideal starting point to build a central product content hub for the organization since it's globally compatible with key retail data systems used today and possibly tomorrow too. Once the organization has identified the complete set of product attributes that are important, most of those can be mapped or identified within a GS1 standards based data model and this can form the basis of the product data structure and custom modules with additional attributes can be defined to extend the data model further and capture attributes which beyond what the standards accommodate but is still important to the organization to capture and maintain.

“Global standards based product data models come offer cross platform data compatibility which in an interconnected digitally driven business environment is a significant vantage point.”

In essence, the right product data management foundation involves a hybrid product data model which leverages the robust & universal GS1 standards based data model at it's core but still allows the flexibility to extend and capture attributes key to the organizations internal requirements too. What is not in question however, is the need to consider standardized data structures while evaluating a product data management solution and how the system will connect and exchange with the larger global ecosystem of data systems and applications.



The Hybrid Product Data Model



Traditional PIM DIY Data Model

Pros

- Very flexible
- Build according to your specific organizational requirements
- Simple data structure

Cons

- Can be very different from other systems data models
- Can be incompatible for direct exchange of data
- Limitations of simple data structure
- Scalability limitations

GS1 Standards Based Data Model

Pros

- Globally compatibles with other standards driven retail systems & applications
- Robust & scalable complex data model
- Defined collectively by global businesses & GS1

Cons

- Not flexible to extend
- Can not be easily altered for specific requirements

The Hybrid Product Data Model Approach

- Leverages the best of both worlds
- Starts on the robust foundation of a GS1 Standards based data model ensuring cross platform compatibility with other global standards driven systems and applications
- Offers the flexibility to extend the GS1 standards data model with extended modules and attributes to accommodate specific requirements & enrich the data further
- Highly scalable by enterprise standards

Getting it Right

The Conclusion

The ecosystem of enterprise business data systems is as interconnected and complex as the information driven consumer retail ecosystem it powers. Great data is among the key drivers of success in this era. Combining the advantages of GS1 standards and the flexibility being able to extend on top of the standardized structure offers the ideal base for product data management. A base that serve the organization well not just today, but for many years to come.

Contact Us



Qliktag Software Inc.
4590 MacArthur Blvd.,
Suite 500,
Newport Beach, CA 92660



+1 949-760-3888



info@qliktag.com
www.qliktag.com

