



Documenting the future of sustainable healthcare.

Roche Diagnostics gives clinicians and researchers more of what they want from product documentation.



"Automating documentation production with Adobe FrameMaker changed the entire process, which gives us faster time to market moving forward."

Thomas Risi, Department Leader, Roche Diagnostics

SOLUTION

Adobe FrameMaker

RESULTS

50% **FASTER** production of PDF documentation



SUCCESS moving from unstructured to structured editing



Customers **LOVE** visual layout and design



Custom XML framework **SIMPLIFIES** authoring



Roche Diagnostics

Established in 1968

Employees: 28,000

Basel, Switzerland

www.roche.com

Partner

commatec GmbH & Co. KG

www.commatec.de



CHALLENGES

- Adding visual elements to documentation to address customer demand
- Automating the conversion of documents from unstructured to structured XML
- Creating content that can be migrated easily to a new component CMS

The power of knowing

In vitro diagnostics are known as the “silent champion” of healthcare. “In vitro” is Latin for “in the glass”. Tests performed outside of the patient, using glass slides, petri dishes, test tubes, and other media, influence more than 60% of clinical decision making while making up only 2% of the cost. Diagnostics help laboratories reliably empower clinicians to make the right decisions for patients at the right time and help patients stay informed regarding their health and well-being.

Roche Diagnostics, a division of the global healthcare company Roche Group, gives customers across the healthcare spectrum—from research institutions, hospitals, and commercial laboratories to physicians and patients—the power of knowing. Roche Diagnostics develops and manufactures hundreds of products and technologies that are both complex and highly regulated, including rapid disease screening tests and high-volume automated tube processing instruments.

High-quality technical documentation is vital to patient safety because it helps ensure the proper use of supplies and devices. However, the technical documentation departments at companies like Roche Diagnostics are continually challenged to keep up with rapid technological innovation, industry growth, and an expanding international clientele that speaks dozens of languages in countries with widely varying regulatory requirements.

Adding structure and visual appeal

For more than 25 years, documentation experts from commatec, a Roche Diagnostics partner, have helped the company develop technical documentation. Depending on the device, a single operator manual can have up to 1,500 pages, with training and service manuals adding up to another 1,500 pages. In addition to developing content, commatec also provides consultation services for the authoring and tool landscape.



“FrameMaker has been our favorite tool for nearly 20 years because in FrameMaker, we always seem to find a solution for any documentation challenge we face.”

Martin Schlicksupp, CEO, commatec

A few years ago, Roche Diagnostics determined that the look and feel of its manuals needed a refresh. Customers were asking for more images and less text, so Roche Diagnostics developed a training manual prototype and then turned to commatec to help make the transition across documents.

“After having the same layout for several years, we wanted to move into a completely new era,” says Thomas Risi, Head of Documentation Core Lab at Roche Diagnostics. “Aesthetically, this involved a new focus on graphics. We also took the opportunity to move from unstructured to structured editing using Adobe FrameMaker as our XML editor.”

Initially, Roche and commatec considered using the Darwin Information Typing Architecture (DITA) as its Document Type Definition (DTD), which is essentially the “grammar” of a file. The DTD for an Extensible Markup Language (XML) file contains the elements, attributes, entities, and notations used. However, DITA was too complex for what Roche Diagnostics wanted to achieve. With help from commatec, Roche Diagnostics created automations for converting unstructured documents to a custom XML framework.

“Our starting point was a document that was creative and filled with insight, but didn’t have rules for standardization,” says Martin Schlicksupp, CEO of commatec. “So, we built the structure ourselves with the right blend of content rules and design flexibility using Adobe FrameMaker. FrameMaker has been our favorite tool for nearly 20 years because in FrameMaker, we always seem to find a solution for any documentation challenge we face.”

Customizations and automations

The customized XML solution commatec created with Roche Diagnostics relies on FrameMaker automations created with FrameScript, an object-oriented scripting automation and customization tool. On startup, FrameMaker loads the scripts that extend FrameMaker functionality.

“Our staff has become very skilled in the WYSIWYG authoring environment,” says Thomas Risi, Head of Documentation Core Lab at Roche Diagnostics. “That’s why we kept the same DTD and Adobe FrameMaker is still our XML editor. We want to make things as easy as possible for our authors.”

Scripting helped automate the conversion of existing documents to structured XML, but the teams also had to modify the DTD. Layout and editorial changes were an iterative tradeoff between adding images and removing text, followed by updates to the DTD to support future documents. The DTD, created with help from commatec, has become the standard used by the 80-member documentation team at Roche Diagnostics and for three other Roche third-party documentation support providers.



“Our staff has become very skilled in the WYSIWYG authoring environment. That’s why we kept the same DTD and Adobe FrameMaker is still our XML editor.”

Thomas Risi, Head of Documentation Core Lab, Roche Diagnostics

SOLUTION AT A GLANCE

Adobe FrameMaker

For more information

www.adobe.com/products/frameMaker.html



Adobe Systems Incorporated
345 Park Avenue
San Jose, CA 95110-2704
USA
www.adobe.com

Customer and critical acclaim

The updated Roche Diagnostics manuals have received rave reviews from customers, who immediately appreciated the new emphasis on visuals. The manuals also caught the attention of the European Association for Technical Communication (tekomp).

Every year, tekomp presents awards to companies that produce exceptional technical documentation. A jury of technical communication experts evaluates entries for structure, text quality, and layout and design. The PDF and electronic versions of the updated Roche Diagnostics manuals received the prestigious tekomp Dokupreis in October 2016. The proprietary online help format for Roche systems, called User Assistance, which is generated from the same structure in FrameMaker, won the recently established tekomp Dokupreis for electronic documentation.

“We were very methodical about the improvements we made using Adobe FrameMaker,” says Risi. “We’re very proud that we have pleased our customers and impressed our peers.”

Topics and time savings

The next advance for the Roche Diagnostics documentation team is the implementation of a new SCHEMA component content management system (CMS). The CMS will allow Roche Diagnostics to move from file-based editing to topic-based editing.

“Today, our DTD database contains topics, but they are all packed into files,” says Risi. “When we have the CMS, editing will be strictly topic-based in Adobe FrameMaker, meaning we won’t have to manage entire chapters in a single file.”

Using content edited in FrameMaker, Roche Diagnostics will be able to manage variants and translations in SCHEMA and then publish and distribute documents. Future plans include optimization for mobile devices, which will improve customer experiences by adding the convenience of mobility.

Since converting to structured XML, Roche Diagnostics estimates the time to produce a PDF has been cut in half. Once content is loaded into the CMS, the company estimates it will be able to cut translation times in half, too.

“Automating documentation production with Adobe FrameMaker changed the entire process, which gives us faster time to market moving forward,” Risi says. “But the time savings don’t tell the whole story. The documents are much more sophisticated, so we’ve improved much more than the technology behind the production; we’ve improved the end user experience.”