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#### Introduction

#### Sharing information as effectively as possible

From the ambitions of our customers, Iquality designs, develops and supports software, apps and sites in order to share information as effectively as possible. Standards and DITA play an especially important role in this. The exchange of information between people and organisations becomes increasingly effective if the interpretation of data does not produce any impediments. As far as we're concerned, DITA is not a goal but a means. In this article, we will further clarify a business case with technical details on the basis of these principles.

#### What is the added value?

Iquality is always looking for trends and digital innovations that allow us to strengthen our clients' businesses. We believe that DITA can play an important role in this. And we are noticing that increasingly more people are willing to consider those possibilities. With this case, we seek to involve even more organisations and people in our expertise and our experiences. Not only ICTers, but certainly also business managers, product owners, startups or simply people with an interesting idea. Within all sectors.

#### **More information**

Would you like to know more about DITA information in a CMS after reading this business case? Or maybe share and test a good idea with us? Please do not hesitate to contact us. For instance, contact Remco van Toor, <a href="mailto:remco.van.toor@iquality.nl">remco.van.toor@iquality.nl</a>.

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### DITA and Sitecore CMS as single source for technical documentation

Writing technical documentation, making it available via various channels and translating it is not an easy task. This becomes particularly complicated when the number of products, versions and different authors increases. Additionally, increasingly more varying parties in different environments do not only want access to merely the documentation, but rather to specific information in the documentation. Add the desire to work more efficiently and save expenses to this, and the challenge is complete. From this challenge, we have conducted an implementation of a content management system (Sitecore) with the XML standard DITA as a starting point for Neopost. The content management system is the single source for the technical documentation (topics, maps, etc.). Publication from the content management system occurs in DITA, PDF or to one or multiple websites. Additionally, DITA can also be imported and a connection has been made with a translation service.

### Architecture; DITA via a content management system

We explicitly chose not to use an XML DITA editor, but rather opted for a generic content management system. That is, we look at it from the information dimension rather than the manual dimension. Through content management, the structure of the information is defined.

In other words, the entire data collection - independent of performance - is standardised within the CMS system. Here, the structures of DITA have been taken as starting point/best practice. For the implementation, we chose not to implement the entire DITA structure but only those components that are important within Neopost. Per object, the fields, relationships, validations, rights, etc. have been established. You can see the structure of a DITA topic here.



Major advantage of this method is that topics can also be connected to other matters, such as products, knowledge base entries, resolutions of service calls, etc.

These links can be used within a website environment, for example (a KB article can link to a topic of a manual). Additionally, the integrity of the content is enforced (by links between items) and the workflow and authorisation ensure a structured and permitted work method.

#### Content management, workflow and translations

Within the Content Management System, content is managed on the basis of the data templates. For Neopost, a data structure was defined that includes all obligatory parts of DITA, plus additional data that are important to Neopost. Some of these data have to do with the many dimensions within which topics exist; think of brands, products, revisions of products, countries, languages, versions, audiences. Sitecore is excellently suited for the fast and easy defining of content structures and the immediate use of these.

#### Reusing DITA content

Sitecore supports multiple languages and versions per content item (this is also true for images, because these are also content items). Additionally, for a content item, one can also determine who can see, alter and remove it (also per field). A content item can be altered in the framework of a workflow/process. This means that a content item can exist in multiple phases, the possible actions that can be performed on a content item can be determined depending on the status/phase it is in. This makes it possible to properly support multiple editors and also to ensure the translation of content to be fluent.

### The automatic translation of DITA content by <u>Lionbridge</u>

It is possible to offer (a set of) content items for a translation from the system itself. In a 'translation project', content items can be collected to be offered to a translation agency. It is possible to collect a complete folder, part, chapter or separate tasks (steps) in one translation project. Subsequently, one can also indicate what language(s) the translation must be. With one push of a button, all these content items can subsequently be collected, converted to XLIFF and sent to a translation partner. In the case of Neopost, Lionbridge's Freeway portal is used. This occurs without any further manual actions, because we make use of the web services that are offered within Lionbridge's Freeway portal.

When the content items are translated, we do not want these to be changed in our system in the meantime. Therefore, content items are placed in a status that ensures alteration is impossible. Once the translation of a set of content items is complete, these are imported and placed in the right language/version. The status of the content items is also changed, allowing it to be altered again. During the translation of a set of content items, one can easily work on other content items of a folder. When the sent files have been translated, the retrieving, importing and processing of the translated content items can be started with the push of a button. Translated content items are automatically put in the right place (as language variety of the sent content item).

#### Converting DITA into HTML

The main difference with other systems is that HTML is not an export format, as PDF is. HTML, or websites, has become much more important. People expect more from websites. Interaction, searching, speed of updates are weaknesses of systems that export HTML. Sitecore is a web content management system, ensuring that websites are not a second rate, but rather a first class citizen! This also shows in the fact that content items (topics, task or product information, etc.) are dynamically delivered to a browser. This makes it possible to personalise the website.

This starts by offering various languages depending on a language choice or URL (.nl is Dutch, the same environment .com is English) and goes as far as (not) showing pages that share content on the basis of authenticity, or showing these differently. This is similar to Single Source publishing, but taken one step further!

By means of the dynamic nature of the content management system, it is also possible to automatically build an FAQ/Top 10 by means of visitor data. The most viewed topics/tasks can receive special attention.

It is also possible to have visitors give feedback on topics (score, remarks). Feedback can be displayed on a website immediately. Product information pages can show related topics/tasks or entire manuals, all because these topics are linked to the product concerned.

#### **Publications and transformations of DITA content**

By making use of Sitecore's flexibility, we can also easily show and use specific data structures that are not supported by DITA. We do so by exporting these to generic topics or tasks. Think of product information, data from an external database, or system message tables, for instance.

Sitecore CMS is also excellently suited for reusing content. This system has implemented Single Source at a very high level. In Sitecore, it is very easy to use content in multiple places, for instance through linking or embedding. The advantage of a CMS rather than files is that links are more easily managed, because all content is listed in a database. Links in Sitecore are not a tag, but an object that is maintained and managed separately. Moving something that is reused (topic, task or a part of these) does not break a link! Removing something that is used somewhere will give a warning.

#### Generating PDF files from DITA with XSLT

Additionally, we have incorporated additional possibilities for Neopost that make it possible to see where content is being (re)used, for instance in which maps or topics. We can also easily reuse tasks, steps, notes and such without having to create dummy topics. PDF (HTML/print) and other document formats are regarded as a sort of export. Within the system, a folder can be converted into PDF with one click (or scheduled), which is immediately available for download from the website. Within the system, it is possible to create multiple output definitions from a folder. These could correspond to the dimensions in which a folder may be located. In this case, it concerns: language, country, brand, product, style and audience.





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