

# Information needs analysis

## For a med-tech company

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Author  
Celeste Augé

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# Analysis and Recommendations Report

## Executive Summary

The research for the content needs analysis involved talking to members of staff around the world involved with the content development cycle. Here are the findings: the challenges, implications, and recommendations.

### **The cycle time is too long**

This means that the wrong information can get delivered. If the content doesn't involve a product launch, it ends up being left until later. A content reuse strategy would mean that thirty to fifty percent of the content could be reused, freeing up authors and reviewers to focus on generating new content. Introducing a content management system and a full content analysis would be the best way to achieve this. The staff would need to be trained up on this new system.

### **Translation costs are too high**

The process is slow and therefore more costly. This would be improved with the new CMS and content reuse strategy. Whatever can be reused only has to be translated once. Increasing granularity — so that information was produced and stored in the CMS as small chunks — would mean that translation could be handed over as each chunk was finalised. These processes would improve the time it takes to translate and drop the cost.

### **There are inconsistencies in the documentation**

This issue came up with many departments. This means there's the risk of a crisis if demands go up. Updates are not being made efficiently. It's difficult for the customer if the incorrect information is used or if there's incorrect formatting or different styles are used. Put in place a structured authoring environment — using a content management system and content reuse — to ensure that content is produced the same way no matter who the author. Develop and maintain a visual style guide so that all content conforms to the same style.

### **Content silos**

Content silos mean that different departments can't access similar or relevant content. Time is wasted figuring out how a product works. Duplicate content is generated from scratch. A CMS will ensure everyone in the content development cycle has access to the same content, include content that can be reused or adapted. Use the CMS to put information handover processes in place so that authors can start producing content straight away.

### **Inefficient review cycle**

Time is wasted by an inefficient review cycle, which means the cycle length is longer than necessary, as well as costing more. There is a risk of incorrect content getting through the review cycle. Introduce a version control system to keep track of the version number, the author, the reviewer, and all suggestions and subsequent changes. This could be effectively

implemented through the CMS. The content reuse strategy will mean that reused content will only need to be reviewed once.

### **Prolonged change requests cycle**

The change requests cycle is getting longer and late change requests delay the release of new products. There is a risk that regulatory reviewers will miss something during the cycle as it stands. Introduce a CMS to manage the change request cycle globally. Ensure that global content authors and localisation teams have access via this central CMS at the right time in the development cycle so they can view the content in context.

### **Unrealistic timelines**

Unrealistic timelines are given to global authors. Costly mistakes can get made in a rush and time is wasted. Introduce a standardised workflow for the entire documentation process. Structured authoring will ensure they can access the information they need it when they need it.

### **Inconsistent use of English**

Use of English by source authors is inconsistent. This means that translation and localisation take longer than necessary. It's more difficult for the customer to read inconsistent documentation. Develop and maintain a style guide for language usage (possibly including it with the style guide for visual formatting). Ensure the guide is easy to access, easy to maintain, and put in place a system of suggestions for updates.

### **Too many changes during product development**

Ongoing changes are being made to content before the product is finalised. Time is wasted revising content multiple times in translation and localisation which leads to increased costs. This was highlighted in several departments. Use a CMS to refine the documentation process and instantly distribute completed source documents globally. A robust content reuse strategy will ensure that content is only sent for translation or localisation or reviewing once.

These findings address the main issues found across the entire content development cycle in Company X. A more detailed analysis with recommendations follows this executive summary.

## Challenges, Implications, and Recommendations

Below are the main challenges, their implications, and the resulting recommendations.

### Challenge: Cycle Time

- Takes too long to get content published.
- Time can be translated to money.
- Think there is the potential to reuse.
- Capacity is limited.
- They launch products faster than they retire products, so the amount of content to update is growing exponentially.

### Implications

The content portfolio continues to grow which puts pressure on already overworked staff. Wrong information may be delivered when departments are overwhelmed. Anything that doesn't involve a product launch will fall to the bottom of the list.

### Recommendations

Introduce a content reuse strategy. Reusing any standardised content allows staff to focus on generating new content while still ensuring all content is both comprehensive and consistent. This increases the capacity and retains the headcount.

### Challenge: Translation Costs

- Need to find cost savings in translation.
- Global content team not working on enough projects at the same time.
- Can only do one country at a time.
- Difficulty managing massive changes across products.

### Implications

Inconsistency is a problem, putting pressure on revision and cycle times when content then needs to be updated by global team. Working one country at a time slows projects down. Time equals money.

### Recommendations

Standardise as much as possible, reuse content. Content that is only written once but reused many times only needs to be translated once. Work on increasing granularity, so that content can be transferred over to global team as its being generated. Introduce a standard CMS that allows this to be distributed globally.

### Challenge: Inconsistencies

- Not always delivered right first time, the correct information is not always used.
- Content has to be reworked.

- Managing changes across all products is difficult.
- Timescales become difficult to manage when multiple revisions needed.
- Documentation is visually inconsistent.

### **Implications**

When demands go up they could end up in a crisis, if the wrong information was delivered before it was caught. Eventually a mistake might be made that would cause a significant problem. Communication with the customer becomes difficult when the correct information is not always used. Documentation can be difficult to read or to directly compare when they don't look similar.

### **Recommendations**

Focus on putting in place an effective structure, so that content is produced in the same way no matter who the author. Introduce content reuse. This means that the quality will be improved due to consistency across different media and products. Develop and maintain a visual style guide, so that anything output by the CMS (or in templates) conforms to a set standard.

### **Challenge: Content Silos**

- Authors don't always get good direction from the marketing department.
- Aren't shown by SMEs how product works, must go through specification documents.
- They don't always know what the right starting point is.
- Sometimes they don't realise that someone is working on similar content.

### **Implications**

Time is wasted figuring out how the product works and what the right starting point is. Time is also wasted in duplicated content.

### **Recommendations**

Make sure that the information needed by different departments is held in a location or CMS that is accessible to everyone. Put product information handover processes in place, so that marketing and SMEs are consistent with this, and so that content authors are equipped to begin producing content at handover. Map out the content development process for all staff and update as processes change. Introduce content reuse to reduce content overlap.

### **Challenge: Review Cycle**

- Previous products get reviewed again by reviewers.
- They go through a lot of revisions which then get changed back.
- Reviewers come in at the end of the process which leads to many errors.
- Sometimes things get changed that shouldn't.
- Some reviewers can't comment on the PDF because they don't have Adobe Professional.

- Reviewers seem to review the same content over and over.
- Reviewers are unclear about who is doing what. They don't know where they fit into the content delivery process.

### **Implications**

Time is wasted in the review cycle, by both the reviewers and the content authors. There is a risk of incorrect content getting through the review cycle.

### **Recommendations**

Introduce a solid version control system. Allow reviewers to access content earlier in the development process, through a central CMS that will ensure all changes are tracked, as well as who made them. The CMS will ensure that all reviewers can comment directly within the relevant documentation.

### **Challenge: Confusing Content Structure**

- Authors are scattered all over the world and find it hard to stay in sync.
- Folder-based file structure used for the content is confusing.
- Versions are difficult to keep track of with current versioning software.
- Authors are creating the same content over and over. Thirty to fifty percent of the content could be reused.
- Authors don't necessarily know when someone is working on similar content.
- Word templates make the more complicated content difficult to format.

### **Implications**

Work is being duplicated, therefore time is being wasted and the content development cycle is made longer. There is a risk that the wrong version will be released. Content authors end up spending excessive time on formatting content instead of creating content.

### **Recommendations**

Introduce structured content. Develop a content reuse strategy. Use a content management system that will allow content to be reused, versions to be managed, and everyone involved to see what content has already been created. A CMS will also take care of the formatting so the content authors will be free to take care of the content.

### **Challenge: Change Requests Cycle**

- Revisions can come in late and have to go through a change request.
- Last minute change requests mean they can't release early.
- Scope creep; change seems small but ends up affecting a lot of other things.
- Once a document is opened for a change they get other changes not identified in the CR.
- Changes not adequately (or accurately) tracked during regulatory review.
- Inconsistent process for change requests make it difficult to verify they have met regulatory requirements.

## **Implications**

The review cycle is stretched out by the scope creep. There is a risk that changes made outside of the CR will not be properly reviewed. Late change requests delay the release of products. Also, there is a risk of regulatory missing something during the cycle as it stands.

## **Recommendations**

Introduce a global content change request process that goes through the CMS. Use the CMS to allow global content authors to access the content at the appropriate time in the development cycle. This will mean fewer late changes and less scope creep.

### **Challenge: Unrealistic Timelines for Global Authors**

- Timelines are not always scoped out correctly.
- Multiple revisions of the final document are frequently necessary, which means the document isn't final.
- Authors are asked to start too early, when the source documents aren't ready yet.
- Global authors are pushed to release early, but then they're given last-minute change requests.
- A lot of parallel work is being done out of sync.

## **Implications**

Work is expected before it can be accurately completed. This means that mistakes can get made in a rush. Time is wasted when the final document becomes the almost-final document.

## **Recommendations**

A standardised workflow which accurately represents the entire documentation process (including global) should be introduced and everyone that works with the source documentation should be aware of it. This would ensure that the timelines would be scoped correctly, and work could be done accurately and on time.

### **Challenge: Use of English**

- Use of English in the source documents is inconsistent.
- Sometimes the text in the original document doesn't match the global content document.

## **Implications**

Translation and localisation take longer than necessary. Time is wasted by translation teams in confirming which text to use. Documents end up inconsistent, making it more difficult for the customer.

## **Recommendations**

Develop and maintain a style guide for authoring documentation in each language. This means that all documentation within a language will conform to the same standards, making

it easier and faster to translate and localise. Using a CMS will help authors to follow these standards, and to see the inconsistencies across documents.

### Challenge: Ongoing Changes to Content

- Ongoing changes to content are made before the product is finalised.
- Content is being pushed out for localisation/translation before it's ready.
- Too many changes are being requested during the translation and localisation stages.

### Implications

Time is misspent on revising content multiple times in translation. This increases the cost of translation.

### Recommendations

Use the CMS to refine the documentation process. Limit the amount of changes that can be requested once a document has been sent for translation. Ensure that content reuse is robustly applied, so that content is only being sent for translation once. This will reduce the cost of translating a document, shorten the translating time, and minimise the amount of times that the documentation has to be reviewed.

### Challenge: R&D Language Strings (for Images)

- They have to generate new strings each time. Reuse isn't available.
- Older products are translated differently even though they might have the same string.

### Implications

Causes extra cycle time, which also means more expense.

### Recommendations

Incorporate language strings (for images) into a content reuse strategy. Set up a bank of strings to pick from. Reuse previously translated strings. Make sure that older product translations are updated so they have the same string.

### Challenge: Inconsistent Regulatory Review Process

- Localisation process is a risk area for regulatory review. They have to rely on the specialist to localise what they see.
- Missing text might not be noticed when changes are made to a pre-existing product.
- Approving a piece of content out of context is very difficult.
- Sometimes the regulatory reviewers are unsure if the in-country reviewer has spotted an incorrect approval.

### Implications

Content can end up going to the wrong country. Documentation for new versions of products might be incomplete. Inconsistencies in the localisation process make it difficult to verify they have met regulatory requirements.



**Recommendations**

Overhaul the regulatory review process, particularly for localisation. Incorporate it into the content management system so that the regulatory reviewers can see the content in context. Use the CMS to manage the change requests and access the source content. This would also allow streamlined communication between relevant departments in the review process, since they would all have access to the same documentation.

## Business Case

Company X is a medical devices company providing Y to customers around the world.

The main business goals are: to reduce cycle time, increase capacity both locally and globally, save on translation costs, increase quality, and most importantly, increase cost efficiency.

All of this needs to be achieved while keeping the headcount. The company is launching products faster than they retire products, so the portfolio continues to grow. This means that the number of pieces of content they need to update is growing exponentially.

There are several dangers in not going forward with this project. Current processes will become overwhelmed with the complexity and volume of content. This will affect quality, and risks the delivery of wrong information. Everyone is already overworked. Crisis avoidance will eventually lead to a costly mistake. Also, with limited capacity there will be few opportunities for a refresh on products. This puts all the growth opportunities at risk.

### Main issues

The main issues around content creation and delivery include the following:

- There are inconsistencies in both the process of content development and in the documentation itself. This has costs in terms of time wasted by authors and the customer experience.
- Translation costs are too high.
- Content silos mean information is not being shared between departments. Content that could be reused is being rewritten from scratch.
- The review cycle overall is inefficient. Change requests are coming in far too late in the process. The same content is being reviewed multiple times
- The content structure is confusing.
- Use of English is inconsistent. Formatting is difficult and inconsistent.
- Global authors do not have easy access to content in a timely manner.

### Strategies to address goals and issues

The following strategy and steps address both the goals and the issues outlined above:

#### 1) **Structured authoring environment**

Introduce a structured authoring environment, including a content management system and a content reuse strategy. This means that everyone involved in the content development cycle will have access to the content that has already been created, as well as instant access to content as it's being created. This will also take care of generating consistent documentation in various formats — print or online — for the customer. Authors will have access to materials generated by marketing, translation and localisation will have access to consistent source documents, reviewers will have

access to content earlier in the development process. Time saved means an increased capacity for new products, and consistent documentation helps keep the customer happy.

## 2) **Training**

Train everyone up on the content management system and new documentation processes. Ensure everyone involved in the content cycle understands the entire process and who is responsible for what. This will help minimise inefficiencies. Training key members of staff and getting them to train in their colleagues is one cost effective way of delivering this. The other option is to produce online training that can be accessed globally, and which can be reused for the onboarding of new staff.

## 3) **Content analysis**

Perform a content analysis, to determine exactly what existing content can be reused, and to develop efficient content development processes that are specific to the company's needs. This will streamline the content cycle and ensure time isn't being wasted, that all functions are being performed by the right people at the right time.

## 4) **Content reuse strategy**

Develop a content reuse strategy, and train all staff to use it within the CMS. Thirty to fifty percent of the content currently being created could be reused. This would save a lot of time, which means an increased capacity without having to increase staffing.

## 5) **Granularity**

Increase granularity. This means that the content is developed in small chunks, making it easier to reuse, easier to hand over to localisation and translation, and it means a more fluid workflow with less time wasted.

## 6) **Version control and reviewing**

Introduce a robust version control and reviewing process. This can be best achieved within the CMS. Authors and reviewers around the world will be able to see who has authored or reviewed or changed what, instantaneously. This vastly improves time costs.

## 7) **Develop a style guide**

Develop and maintain a visual and language usage style guide. Put it online, preferably in an easily-updated web format, and encourage everyone to refer to it when developing content. Have a system for suggesting improvements in the style guide, and make sure all staff are kept up to date on any changes. This will ensure consistency for the customer, and efficiency for all authors and reviewers within the content development cycle, speeding things up for localisation especially.

## Opportunities

By implementing the strategies outlined above, the opportunities available to the company include the following:

- A streamlined delivery of content as soon as all the inputs have been approved.
- Almost instantaneous delivery of ready-to-translate content around the world.
- Improved documentation that communicates consistently to the customer.
- High-quality content that is consistent across all products.
- The capacity to launch more products at once.
- New processes to manage changes across all products.

The initial outlay in software costs and training time will be balanced out in time by the efficiencies and increased capacity gained in the content development cycle, from initial product document authoring to final reviews and localisation. The opportunities are there for the taking.