Beyond Words

The Reinvention of Technical Documentation

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Introduction: Beyond Words

Welcome to this eBook: Beyond Words: The Reinvention of Technical Documentation. We're excited about the future of __customer experience management (CXM)__ and hopefully you are too. CXM is a strategy that ensures every customer touchpoint your company delivers is the right one. This eBook focuses on how you can create customer satisfaction by offering insight into new concepts and best practices in how you create and deliver technical content.

Many companies have already modernized their technical documentation by converting publications to __structured content__ using open standards such as __DITA__. The overall publishing process is considerably improved through automated publishing, content reuse and lower translation costs. But the potential of structured content goes much further.

Companies now want to transform their publications into high quality customer touchpoints to support larger CXM initiatives beyond technical documentation. For many, contextual personalized product content also supports marketing efforts to engage with customers at all points in the customer journey. This has the added benefit of reducing customer support costs through easy-to-find, multi-channel, multilingual documentation.

This eBook is modular and is comprised of stand-alone sections, so you can use, share and refer to each section as needed.

The Customer Experience... More Than Marketing

Your brand is defined by the sum of every experience your customer has with you, at every touchpoint – from a print advertisement to a website, from an in-store purchase to online help, from marketing content to user documentation... online or offline... mobile or PC... presale or post sale. Each and every experience is crucial. Customer Experience Management (CXM) is the strategy companies use to truly engage with customers and provide them with a relevant, consistent, high quality experience.

1 Content Optimization & Collaboration

Many different stakeholders in your company, including customers and partners, can provide valuable content. However, the more content contributors, the greater risk that you present fragmented messages to your customers. To make sure that your customers receive consistent, clear communication, companies must speak with one voice by empowering all stakeholders to work together.

Quality Automation

You can dramatically improve content by automating basic quality checks during the creation process. Corporate style guides, branding and technical terminology as well as basic spelling and grammar checks all assist you in creating that 'one voice' that unifies your message.

Ideally, content is checked while it is being created to prevent inconsistency. The best way to do this is to use a centralized content repository integrated with quality checking software that shows the content author where they have deviated from corporate standards, right within their editing tools (i.e. Microsoft Word, XMetal Author, or browser-based editors).

User-Friendly Tools

You can also empower content creators with authoring tools that are easy to use and facilitate content creation. This ensures that content creators focus on the task at hand rather than on learning a new software tool.

The best content creation tools make it easy to create content and to track the editorial process efficiently. For example, many regulated industries – such as life sciences, finance, and insurance – require strict tracking of the content approval process for auditing.

1

Streamlined Review

Most content goes through a revision process that involves review and approval. A review process that is integrated with content creation ensures true collaboration. Companies can achieve this vision by moving away from externalized reviews (such as printed markup or PDF comments). You can lose even the best productivity gains in your content creation process if the review process entails manual collation and changes to content.

On the other hand, if creation and review processes use the same tools, you can centralize feedback from multiple contributors, eliminate duplicate comments and create immediate and direct interaction between reviewers and writers.

In Other Words

Empower your subject matter experts, across your organization, to share their expertise in an easy, streamlined, process-oriented way, so that your customers can benefit from the best information your organization has to offer, resulting in customer satisfaction and in turn, brand loyalty.

2 Rich Media

Today, most companies know that their customers crave, even demand, multimedia content. Many respond by simply uploading videos to YouTube. While this approach is fast, it introduces long-term problems by neglecting standard print and web processes. In addition, content contributors face the pressure of creating more content, with the same time and resources, but without the benefit of established tools and practices. This has obvious impacts on both quality and efficiency.

Engagement Through Rich Media

Rich media is more than video. It also includes 3D diagrams, animated GIFs, audio tracks and interactive illustrations. Alone, these formats are just individual files, but when combined with metadata and integrated with related content, these formats provide customers with a richer, more relevant interactive brand experience.

Rich media doesn't stand alone. Its true value lies in how it is integrated and contextualized: where, when and how customers view and use it. Direct feedback, commentary, dynamic information overlays, hyperlinks, subtitles and interactivity all add richness.

Everything in Context

By dynamically targeting multimedia to specific customers, companies can create contextualized engagement with greater relevance. You can present videos for different customers on the same page based on your knowledge of those customers, such as the products they have purchased and the type of information they have previously searched for and viewed.

You can also guide your customers through a rich media experience by creating dynamic links between traditional help text and interactive media. For example, you can link each step in a task to a specific timestamp in a video to directly show how they can complete each specific step in the task. For customers that learn better visually, rich media gives them easy methods to understand your product.

"Now that consumers have tasted video, rich Internet applications, dynamic ads, and immersive mobile apps – how will they ever again be satisfied with text and static photos? The answer is that they won't be satisfied – and that almost overnight it has become mandatory for enterprises to create, manage, and deliver massive amounts of rich media."

– Tim Walters, Ph.D., *Rich Media Shines in the Era of Engagement*, Digital Clarity Group

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In addition, rich media is globally accessible across channels in multiple languages. By automatically using translated audio tracks or subtitles based on your customers' geographic location, you give them direct access to information in their language of choice. You even have the option to use completely different media from region to region, tailored to specific audiences in a specific location.

Integrating Video

Integrating multimedia with technical documentation offers exciting new opportunities to deliver higher quality information to your customers. Educators have long known that people learn in a variety of ways, and each person has a unique learning style. By integrating multimedia and text, you can offer multiple formats to make understanding your content as easy as possible for your customers. In the past, issues have arisen regarding scalability and complexity, with many organizations lacking resources, time and money to deliver this rich customer experience.

Leading media management systems enable you to add this richness to all types of video without the overhead and complexity of a manual approach. For example, you could link a video that shows a customer how to change a printer cartridge with an eCommerce store so they can easily purchase replacement ink for their specific printer.

Controlling Your Brand

While it's clear that you need to publish videos to many online channels to reach your customers, it's important to remember how this can impact your brand. Publishing videos to a third-party platform means that you are unable to personalize and target videos to specific customer segments.

As a result, you may miss out on the contextual experience you want your audience to have. Valuable comments and feedback from your viewers may also be lost to most of your organization without the benefit of monitoring processes.

Companies should invest in a media asset management system that can maintain brand control while still automating the publishing process to various channels. That way, even when you publish videos to these social media channels, you can point viewers back to your website to maintain personalization, greater brand control, and the targeted customer experience you uniquely offer.

2

Leveraging Structure

Once technical documentation is structured, companies can leverage the resulting metadata to provide a deeper integration between media and existing publications. By combining existing images with DITA content, you can take advantage of content semantics to transform these images into rich media.

For example, imagine a help topic with several steps. Each step has a description and an associated image. You can combine these images with corresponding descriptions to generate a single animated GIF with each step's descriptions as a text overlay. This creates a richer customer experience by combining the text and image, but will not require the same production costs as video and will require less bandwidth for mobile devices.

Also, on the back end, by embedding a link into a reusable DITA topic that points to a single rich media publication, comprised of multiple videos for various personas, languages, etc., content creators have total flexibility in updating specific videos within a specific publication without editing the publication itself.

In Other Words

Integrate rich media into your technical content to increase the value and usability for your users. Publish it through channels that allow you to control your brand, and tailor the content for different audiences.

3) Rich Data

Companies are increasingly investing in tools that help them make better business decisions. Many tools focus on analytics that aggregate data points into a reporting dashboard and bring to light important hidden trends that affect business initiatives.

Technical communication is no exception to this trend; however, traditional publishing formats may make data gathering difficult. For example, if a company publishes lengthy PDFs to their website, the only data point is how often the PDF is downloaded. While this indicates the popularity of individual publications, it does not provide information about which content within the publication is most valuable to customers.

Fortunately, dynamic delivery and component-based authoring remedies this problem. Modularized publishing of stand-alone topics within a dynamic delivery tool lets you track many new data points.

Gathering Metrics

Web metrics can indicate how popular a specific topic is, the path a customer has taken to find the information they are looking for and can even indicate topics that are not used. All of this data is valuable and can be used to create a better customer experience.

For example, you can provide quick links to frequently used content, making it accessible as possible, and revisit those topics that are not used to determine their value.

Information about the search terms your customers use can help you tailor your language and to create content that focuses on how your customer thinks about and uses the product. In addition, you can use this information to improve SEO, glossaries and indexes.

3

Measuring Engagement

More advanced platforms measure social engagement (sharing), feedback, comments and quality ratings across languages and regions. All of these measures show you the value your customers place on your content and can guide strategies, translations, content development plans and even product development. Analytics built into the delivery process can provide you with a direct channel to this valuable information.

When combined with other data points, this information further benefits customer support. By combining ticket information from a support portal with the search and use of technical content, you can identify the main customer pain points and answer customer questions more quickly and effectively in both technical documentation and customer support.

In Other Words

Creating and delivering great content requires you to understand what your customers need. You can gain this insight by gathering rich data about the content you publish and how it's used.

4 Be Mobile

Customers now expect any information to be readily available on their mobile device. This has a tremendous impact on how your organization must interact with them, including how you provide technical documentation. To keep up with these expectations, your organization must be equipped to deliver content on the mobile channel.

Mobile Ubiquity

Content delivery strategies need to support an ever-increasing number of mobile devices with unique screen sizes, operating systems and functional capabilities. Data-heavy PDFs and existing online documents often fail to address the mobile channel and mobile capabilities.

Current solutions often use **Responsive Design** as an initial approach. Unfortunately this does not address device-specific needs or deliver the optimal mobile experience. For that, you should consider implementing **Adaptive Design** which involves a server-side component.

Responsive Design	Adaptive Design
One codebase (CSS)	Server-side software combined with CSS
Only works for newer mobile device	Works for all mobile devices
Ignores mobile context	Can leverage unique device capabilities (GPS)
Loads entire web page	Loads only the content useful for the device
Only one page template	Uses device-specific templates for a better experience

"The transition from a PC or notebook to the 'always on' smart phone or tablet is not primarily about the smaller, more portable, mobile device. It is rather about the fact that computing services are now available virtually wherever and whenever the user desires them. The mobile shift marks an evolutionary leap to the era of ubiquitous computing."

– Tim Walters, Ph.D., *Rich Media Shines in the Era of Engagement*, Digital Clarity Group

4

Mobile Delivery

To effectively address the challenges of mobile delivery, you need to rethink the customer experience. How do your customers consume content when they use a mobile device? Tablet experiences are different from that of a smartphone, so they need to be treated as a separate delivery channel.

On mobile devices, people often use search to locate content as opposed to referencing the index or table of contents. In addition, mobile delivery offers a great platform for rich media such as videos, animated images and audio, while maintaining access to corresponding text.

Mobile Support

Since many customers look for additional levels of support when searching technical documentation from a mobile device, you can directly integrate customer support options. For example, one-click support ticket creation, with pre-filled form fields based on the current help topic makes it easy for the customer to contact you. Similarly, phone numbers, Twitter integration and other links to your customer support interfaces enable your customers to interact with you in their channel of choice.

Mobile Adaptability

Companies should take advantage of the unique capabilities of mobile devices. Built-in cameras can scan codes on the product to deliver product-specific information quickly and easily. Built-in GPS can identify the best default language for content and integrate with mapping software to display the nearest in-person support location, resellers, service providers or repair shops.

Field service personnel might even use the camera and scanning capabilities to identify parts, order items or provide on-site assistance to complete their service calls as easily as possible.

In Other Words

Don't just deliver the same content and format to all devices. Be strategic in how to make your content mobile-ready, mobile-friendly, and mobile-interactive, while considering your audience and their need for specific information.

⑤ Be Global

As customer expectations for mobile access have increased, so have their expectations for localized content. Thanks to the world-wide use of the internet, all online businesses are global, whether they want to be or not. Therefore your content must be available to your customers in all relevant languages.

In the past, many companies would triage content for geographic regions into distinct tiers based on their value to customers and the company. A marketing brochure might be translated into all languages, but a knowledgebase article may not be translated at all. So some regions might get 80 percent of content translated, while other regions only minimal content translated by local staff, if at all. This can lead to both inconsistent content and poor quality, resulting in missed opportunities to provide customers with what they need.

Localization Strategy

It's not that these companies didn't want to translate all of their content, but often the existing processes, resources and tools were too expensive to justify. Fortunately, the advent of statistical machine translation and automated translation systems, coupled with reusable content has gone a long way to mitigating this issue.

While content reuse lowers translation costs, it must be managed to ensure translators can consider the context of the content. Essentially, their ability to preview content in the publications in which it might appear ensures that the correct translation is applied. Additionally, the categorization of content into levels of importance is still required to ensure translation dollars are spent efficiently. Today, publication analytics greatly improves this process.

Prioritizing Content

By tracking which content your customers use most, for the longest period and with the most engagement, you can determine where to spend your translation dollars: human translators, machine translation, or a combination of the two. This often differs from language to language, but pre-translating all material using machine translation significantly reduces the time it takes for human translators to review, edit, and ensure quality. Less-trafficked content may remain machine translated, provided that quality measures verify the usefulness of the output.

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Further content improvements can then be automated based on machine translation quality scores and publication analytics to bring in human translation when necessary using a translation management system.

For example, if machine translation quality is low and publication analytics indicate that many customers are accessing the translated content, the system can automatically route content to a translation management system for further translation and editing by human translators.

Beyond Translation

Translation is just one part of being global. Different regions systems, you can create a two-prefer some channels to others. In particular, PDFs may still be way conversation between content popular in print-centric countries, but won't be as effective in creators and customers, regardless of emerging markets that primarily use mobile phones to access language. information, such as China and India. By focusing on delivery content across all channels, you ensure all customers get content in the format they want or need.

You can further take advantage of the dynamic nature of structured content to deliver more culturally relevant experiences, such as, swapping out images and videos or using regional color schemes. By integrating machine translation with commenting you can even facilitate basic conversations between content creators and content consumers, regardless of language barriers.

In Other Words

Translation solutions are at the heart of it, but globalizing content is not just about language. Take the time to tailor your content to cultural nuances, and the devices used in different regions of the world.

6 Be Social

More and more companies now engage with customers via social networks. While creating a presence on these sites (e.g. **Facebook**, **LinkedIn**, and **Twitter**) is important, companies also need to hear what their customers are saying about them, where the conversations happen.

Primarily, these conversations occur outside of company – controlled channels, so a social listening platform is vital. You also need to know what customers are saying within company-controlled channels. Using integrated publication analytics you can see how your customers use your content, what they search for, the results they select, how they navigate content and how they discover topics.

Two-Way Conversations

It's also important to enable conversations between content creators and consumers. You can do this by integrating feedback loops directly within the content, so that the content creator actually sees the feedback.

In addition, the content creator should be able to respond and update content based on the feedback. This shows customers that not only are you listening, but also that you have given their suggestions the consideration they deserve.

Since customers come from all areas of the globe and multiple channels, these feedback loops need to be channel and language independent. So whether a customer uses their PC or smartphone, and regardless of the language they speak, their feedback reaches the right person who can act on their comments.

6

Share and Share Alike

You can also promote the larger ecosystem around their products and services by empowering customers to share technical content with their social networks. By building sharing into publications and content delivery, you can provide much larger volumes of sharable content.

Modular content, such as DITA topics, can be shared more easily since they can stand alone outside of the context of a single publication. You can track this content using hashtags, short URLs or even QR codes to enable better social listening analysis. Since not all of your customers hang out in the same social networks, the sharing options need to be as agnostic as possible. This includes geographic-specific networks like Weibo in China or Orkut in Brazil.

Finally, the most forward-thinking Marketing teams will work with technical content creators to highlight the best connection within publications to improve brand impression and expose new customers to great content simultaneously.

In Other Words

There are two key components of being social: 1) make your content easily shareable in bits that can stand on their own in any context; and 2) listen to what people are saying about your company, products and people – and respond accordingly to manage your brand.

7 Content Discovery

You can create great content, but if your customers can't find it, the value is lost. For most companies, all content is online, so all content creators – not just web and marketing teams – need to be concerned with search engine optimization (SEO).

Many technical content creation teams are not familiar with SEO best practices, since traditionally, it has not been part of technical documentation. Fortunately, structured content already improves search results by providing search engines with greater context through semantic elements.

For example, when searching a PDF, the only content exposed is readable text. But when you move this content to a friendlier online file type, the embedded formatting, such as bold and italic tags, alert search engines to the importance of specific words or phrases.

Further improving the search results, structured content's use of descriptive tags that describe the content also informs the search engine about your content's purpose. This metadata dramatically improves SEO over PDF and even HTML. This drives the best content to the top of customer search results and makes it easier to find.

Faceted Search

Content owners must also enable content discovery beyond basic search results. Faceted navigation categorizes content across publications and deliverables. This lets your customers discover related content outside of the publication they are viewing. For example, a customer searches a user guide for new feature information. In addition to search results within the user guide, the customer may also see results from other publications, multimedia and other types of content about the new feature.

Structured content makes managing these categories possible through subject scheme support, which automatically adds new content to existing category frameworks.

7

Recommending Content

Recommendation engines were originally developed for eCommerce to provide recommendations to customers about related items for purchase or to show similar items that other customers have purchased. By automating suggestions based on customer behavior, the best and most useful content automatically rises to the top of all search results. Similarly, for technical documentation, integrated content analytics can inform content creators about what content is most popular.

This allows content creators to give these topics the most attention.

With the combination of powerful search engines, improved SEO through structured content, faceted navigation and possibly even an integrated recommendation engine, customer should always find the content they are searching for, and more importantly, useful content they didn't even know existed.

In Other Words

If a tree falls in the forest and no one hears it, does it make a sound? Similarly, if great content exists but nobody sees, is it really there? Great content is only valuable if it can be found and consumed by your users. Take the extra time to prepare the content in a way that offers the most relevant, contextual, value-rich experience for your audience.

Conclusion

It's safe to say that we all strive for the same thing: delivering great content to our customers. But there's more to it than creating it and publishing it.

The first step is embracing technical content as a critical touchpoint in your customer's journey and therefore must be incorporated into your organization's overall customer experience strategy.

The second step is creating an internal and external infrastructure that supports an integrated content approach.

The bottom line is that you must meet your customer's needs for accurate, valuable information, exactly when they are looking for it, suited to the device they are using, appropriate for their language and culture, and in an interactive manner that allows feedback and sharing.

If done right, this strategy leads to satisfied customers who are willing to advocate for your brand around the world.

For more information, visit www.sdl.com