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A new take on Learning

Deeksha R

Abstract: We would be providing a session on how we implemented tutorials as a new means of learning. Tutorials are learning materials catering to a specific use-case, where users can achieve a goal at the end of a stipulated time frame. These tutorials help customers to gain hands-on experience of the product with minimal knowledge of the product and assess their learning at the end of each tutorial. The presentation comprises of why we opted for tutorials, how the tutorials are implemented, and the outcome. We will also be showcasing how it added value to our product and the customer feedback.

We would be providing a session on how we implemented tutorials as a new means of learning. Tutorials are learning materials catering to a specific use-case, where users can achieve a goal at the end of a stipulated time frame. It is an organized way of categorizing complex tasks into smaller chunks, on the completion of which gives the users a sense of achievement as well as increases their learning curve. These tutorials help customers to gain hands-on experience of the product with minimal knowledge of the product. The knowledge checks provided at different stages of the task reinforces the concepts and keeps the customers engaged.

Each learning task has a clear and crisp description that states what the users achieve when they perform that task. Generally, technical documentation alone is not enough for a user to clearly understand the real use of an application or software. Tutorials provide use-case specific tasks for the users to try out, for a deeper understanding of the underlying technology.

Tutorials provide a clear step-by-step explanation of user tasks with clearly illustrated images and screenshots. This helps in reducing the confusions when the user must deal with a lot of UI elements and navigations. Tutorials also contain a navigation on the right-hand side of the page that provides an overview of the steps involved in the task. The users can skim through the tutorial and directly proceed to the required step if needed.

Tutorials are written in markdown language and are maintained in GitHub. It is periodically updated to maintain technical accuracy. Tutorials can be accessed using an SAP tool called Tutorial Navigator. Tutorial navigator lets the users provide direct feedback in general or specific to certain steps of the tutorial.

SAP provides learning materials in the form of missions, groups, or tutorials. A task is categorized as a mission, group or a tutorial based on its complexity. A mission is a self-paced task with a set of groups and
is a high-level learning goal. It generally describes an end-to-end scenario. Each group contains a set of tutorials. A complex or time-consuming task is generally categorized as a mission.

Each tutorial is audience-specific. Some tutorials target the beginners while some are meant to level up the users who have completed the beginner level tasks. The users also receive badges upon completion of tasks, which keeps them motivated to try out more.

Tutorials provide an additional support in conjunction with other technical materials. It helps the users in strengthening the foundation of concepts as well as enhancing their knowledge of our products. Tutorials are one of the best ways to reach out to a wide range of customers from different backgrounds and introduce them to a plethora of technological opportunities. The easy-to-understand way of explaining and the interactive user experience of tutorials attracts a large section of novice users to try out and experience SAP products. The presentation comprises of why we opted for tutorials, how the tutorials are implemented, and the outcome. We will also be showcasing how it added value to our product and the customer feedback.
Accessible Communication Techniques for Visually Impaired People

Nancy Petricia, Beatrice Isaac

Abstract: Technical Communication spans its arena not just for normal end users but thrives to prove its niche for people with Visual impairment. Visual impairment varies from reduced vision to blindness. According to the World Health Organization, about 1.3 billion people in the world live with some degree of visual impairment and in this 36 million people are blind.

Writers have huge opportunity to make these people as enablers to function on their own using various assistive technologies twined with accessible communication techniques.

Though Assistive technologies can make text accessible, but they cannot render images in meaningful ways without textual information. For example, Assistive technologies can help in magnifying print, adding audio to the text, or enabling users to read through braille, but still users could not complete the defined task and are held up. Hence, we need some better communication techniques to enable these users to function tasks with ease.

This paper talks about various techniques that writers can adapt and follow to make better documents for visually impaired people.

Understand how blind or nearly blind people read - The first thing when we think of a blind person reading is using Braille, a tactile writing system. Another way is using audio. This method is quite promising as text-to-speech services are becoming more popular and are comfortable to use.

Know Tools and Technologies - There are several tools such as ClickHelp for documentation are available. However, writers should adapt a new writing checklist to cater the needs of the end users.

Screen Reading and Screen Enlarging technologies though conventional, but predominantly used for near blind people. However, these technologies are not successful as many find difficult in understanding the text with poor voice quality, narration, and vocabulary.

Thus, a pressing need of extra attention to punctuation and sentence division to force pauses in speech is required. The text should follow logical flow and abbreviations should be expanded and explained properly in the first occurrence.

How Technical Communicators can use Accessible Communication Techniques

Following are some guidelines that can enable writers to create a better content: [Grab your reader’s attention with a great quote from the document or use this space to emphasize a key point. To place this text box anywhere on the page, just drag it.]
• **Good to maintain the content online** - While writing content, always keep in mind for single sourcing techniques. Users are more comfortable to access online content than using hardcopy information. With hard copy, the visually impaired person needs to feed the content into a reader or scan in the computer to access the information.

• **Use Simple page layouts and designs** - Page layouts and designs enable you to maintain the content with ease. With simple background, screen readers can read the text or enlargers can zoom in the content with ease.

• **Always Choose for a text-based navigation** - When the information is text it is easy for the user to navigate until the last page. Adding the graphical navigation most of the times stops responding, and there by the users are held up.

• **Add text alternatives** - With the graphics, add descriptive content, for example captions, descriptions in paragraphs, alternate text, or explanations. While writing for graphics, give importance only to the graphic content but not for appearance or layout of the graphic. Give importance to the concept of the graphic.

• **Use readable fonts** - Move away from system fonts and check for fonts with good quality that can scale well when enlarged, for example TrueType fonts for online content.

• **Use high-contrast colors** - Choose colors that contrast well (do not use black on dark blue). Most of the times, it is good to stay with system default colors. These colors are easier for the reader to adapt the display to specific needs.

• **Stay Away from Emphasizing** - Some readers may not interpret bold, italic, underline, or special fonts.

• **Add Labels** - Use descriptive terms. For example, write as Table of Contents, Index and Glossary. Do not give as Click here for Index.

**Follow Checklist**

Once the content is written, writers can maintain the following checklist to ensure the better-quality content:

• Use font size with minimum 16 or more.
• Use at least 1.5 line spacing.
• Text aligned to the left side is easier to read.
• Use plain sans serif fonts. These type fonts preserve original letter shapes.

Beatrice Isaac is a Principal Technical Writer at HCL Technologies Limited. Her thirst to learn new process and technologies intertwined with writing paved a niche in technical documentation. With 12+ years of experience in writing on several domains such as telecom, storage networking, security, and finance, she is still curious to learn new technologies. Her hobbies include listening to music, reading, gardening, and learning something new be it new language or new art.
- Ensure that the text on all images in your documentation is also readable.
- Use high resolution images.
- Ensure that a good contrast between background and text is maintained.
- Do not use underlined and italicized text.

Use Correct Stylesheet

Writers can also create separate Style CSS with all the above things in place. The documentation set can be maintained separately.

Ensure that you use a right tool for documentation that supports the new style sheet with single-sourcing capabilities.

Conclusion

Technical communicators can use the above guidelines to make the information accessible to all audiences, including completely blind people and people with any degree of low vision.

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Nancy Petricia is a Principal Technical Writer at HCL Technologies Limited. Nancy Petricia started her career as a Developer, where she developed and authored content for the project that she was involved. She could see her interest slowly moving into writing which led her to take up the TW course and become a Technical Writer. The years involved curiosity in learning and analyzing the various tools and processes. She loves to dance, sing, travel, and makes delicious banana cakes.
API documentation: My top three challenges

Diana John

Abstract: Ever felt that API documentation lacks something even after thorough reviews? This is because our reviews are mostly editorial in nature and we miss validating the usability part of the APIs. In this session, I talk about the three challenges I faced with API documentation as a writer and user.

✓ Challenge #1: Missing big picture?

In my project, the API documentation included only reference information—description of API input parameters and responses. The API documentation typically does not contain conceptual information about the overall working system and how the various endpoints work together. A new user needs to understand the end-to-end working of the system and how to extract relevant data to link to advanced reporting systems.

✓ Challenge #2: What does this error mean?

While I was executing a PUT operation, I got a 500 Internal server error. Google told me this was related to invalid syntax, which doesn’t convey much to the user. The API documentation failed to convey the exact cause for this error code. Being a writer and user, how do I supposed to understand the format expected by this PUT operation?

✓ Challenge #3: How to keep the API documentation up-to-date?

The writers’ obtain the Swagger docs from the Dev team and pushes them manually to the portal. It is always the writers’ responsibility to keep the API docs up-to-date in the portal. The dev team had to follow a disciplined approach in updating the writing team about the API changes. We cannot always guarantee consistency in this approach. The key
**takeaway of my presentation is that what a writer can do to develop, test, and deliver an effective API documentation.**

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**Challenge #1: Missing Big picture**

The product API documentation mainly consisted of the reference docs. The reference documentation includes a list of APIs, their input parameters, responses, and other details.

These reference docs do not explain how all the endpoints are supposed to work with each other, how users can leverage the API to get real business tasks done.

To overcome this challenge, we had to introduce the non-reference API documentation. The non-reference API documentation is one of the most important factors in determining an API’s success. Developers can quickly implement an API and understand what is happening with it when strong, easy-to-understand documentation is available. The non-reference API documentation is the key to a great DX (Developer Experience).

A combination of reference and non-reference documents make a complete API support system.

As non-reference documents are conceptual, it falls under the writing team’s domain.

To enable a great DX, product writing teams must include the following non-reference API doc components:

- Overview
- Getting started
- Sample code
- Reference material
- Sandbox environment
- FAQ
- Support line

In this presentation, my talk will be limited only to the guidelines related to the Sample code block.

- Begin adding sample codes for frequently used APIs.
- Code samples must showcase the real-world use cases.
- Ensure testing the sample code by copying them from the API portal and executing them.
- Code samples must be self-contained and easy to understand as possible. The aim is not necessarily to have a complex smart code that impresses the Experts rather it is to have a code that a general audience can understand.
- Do not include server-side dependencies within your code samples. Most of the time the general audience may not be able to access those internal server sites.
- As far as possible, provide code snippets for most commonly used languages.

**Challenge #2: What does this error mean?**
In case of a GET operation, it is easy to tell if the request was successful as we get the expected response. However, in case of operations like POST, PUT or DELETE, where the data within the resource is getting altered, we need to rely on the HTTP response codes.

The HTTP response codes indicate whether an operation was successful or not.

In the example response, **500 Internal Server Error** does not convey the exact cause for the error and hence is of no use to the user.

To overcome this challenge, the custom error code was introduced that gave the context with more useful and actionable information.

For example:

**500 Internal Server Error - The request is invalid due to missing or invalid elements such as the request body, Step ID, or Execution ID.**

The writing team collaborated with the Dev and the testing team to identify all the possible error scenarios for a given API. The data was also collected from the Services team as they are the first contacts of our customer. Co-incidentally, we also received a similar kind of request from one of our internal customers.

The possible error codes were listed for each API as follows:

As these codes are a great source of information in troubleshooting the system, it is a good practice to include these errors in the Troubleshooting guide.

For a given API, how can a writer confirm if all the possible error codes are documented?

1. Test the API
   1. Execute a POST/PUT/DELETE operation
   2. Purposefully change a parameter so that it invalidates the operation.
   3. Check if the status code returned is documented.
2. Collaborate with cross-functional teams

**Challenge #3: How to keep the API documentation up-to-date?**
The Swagger docs generated by the Dev team were manually pushed to the doc Infocenter/portal. It was the writing team’s responsibility to keep the API docs hosted in the doc infocenter up-to-date. The dev team also must follow a disciplined approach in updating the writing team about the API changes.

To overcome this challenge, the writing team in collaboration with Dev team implemented auto-publishing of Swagger docs to the documentation Infocenter.

**Development team contribution:**

I. Annotate the API code.
II. Use Swagger Code generator to create Swagger specification (JSON/YAML)
III. Convert the Swagger specifications to AsciiDoc formats using the Swagger2markup tool.
IV. Convert the AsciiDoc files to HTML/PDF using the AsciiDoctor tool.

On successful execution of the above steps, the PDFs/HTML files generated are zipped and pushed to the Dev repository.

**Writing team contribution (Docbook framework):**

I. Create and configure a Swagger book in the Git project.
II. Update the settings.xml with the Doc repository URL.
III. Change pom.xml to fetch files from the Dev repository.
   I. The zipped artifacts are pulled to the doc repository.
IV. Run “mvn compile”
   II. On successful execution, the artifacts are un-zipped into the Swagger book.
   III. The jars are published onto the doc Infocenter.
Artificial Intelligence and New Generation Content

Ravi Kumar Adapa

Abstract: For a lot of people, artificial intelligence is a matter of hollywood scifi, hi-tech, and sophiya-the humanoid. When I started exploring the opportunity of using AI with documentation – that’s exactly what my feeling too. It was a big deal.

A few months later, thanks to Alexa and new generation open source technologies; leveraging AI in documentation for content creation, content quality, content usage, and content intelligence is now a reality.

What’s Artificial Intelligence?

As writers, our strengths lie in language, information architecture, information processing, metadata etc., and at the core of AI lies similar concepts such as NLP, NLU, Programming, Segmentation etc. Yes, coding and the complexity programming are something that we can take help from our developer colleagues. Or we may leverage some of the plug-n-play AI tools such as IBM Watson to help in our requirements and experiments with AI.

Don’t be overwhelmed friends, let’s look at what we do in our jobs. I am sure your daily routines are filled with:

- Information Architecture
- Information Maps
- Content structure
- Metadata
- Segmentation
- Indexing
- Content Structure

If you extrapolate these concepts, you will understand that the core concepts of Artificial intelligence and Information Architecture are closely connected.

Artificial Intelligence and Maslow’s Pyramid

The session also highlights how the AI evolution and progress can be mapped to the famous Maslow’s needs analysis. The pyramid structure of AI usage in documentation will be discussed as part of the session.
Technical Content and Artificial Intelligence

We’ll talk about various use cases as to how AI can be used in the entire life cycle of a technical writer; from need analysis to content delivery; from product design to usability assistance; from information design to customer success.

Join me to know more about how evolve and thrive in this AI (re)evolution?

Session Objectives

This session provides insights into how AI is transforming our lives and products for customers.

- Artificial Intelligence and businesses
- AI use cases in documentation
- AI and Roles
- AI in the daily lives of writers, managers, business analysts, content strategists and more.
- AI opportunity in optimizing product adoption and customer engagement
- AI for Customer Success.

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 Artificial Intelligence (AI)

Definitely a buzzword right now, it has reached all-time highs in terms of hype and usage in the market, and people often associate it with images of cutting-edge developments like self-driving cars, voice activated assistants or the workplace of tomorrow. In reality, Artificial Intelligence is a very foundation term that covers all the theoretical and development work that is
allowing computers to accomplish tasks normally associated with human intelligence.

- Natural Language Processing: NLP is a subfield of linguistics, computer science, information architecture, and artificial intelligence concerned with the interactions between computers and human (natural) languages. In short, how computers programs can process and analyze the large amounts of natural language data for an outcome.

- Natural-language understanding or natural-language interpretation: NLU or NLI is a subtopic of natural-language processing in artificial intelligence that deals with machine reading comprehension. Natural-language understanding enables machines to understand the language and solve problems.

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**AI Revolution and Industries**

We are aware that the world has moved from industry 1.0 to 4.0, products have switched from on-prem to cloud, customer needs and expectations continue to change every single day, from industrialization to intelligentation – AI is revolutionizing across the industries. As the industries transform, the need for reforming Technical Information is essential.

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Automatic text summarization

Saurav Ghosh

Abstract: Humans can consolidate textual information from multiple sources and organize the content into a coherent summary. Can machines be taught to do the same? The most important obstacles facing multi-document summarization include excessive redundancy in source content, ambiguous sentence construction, and the shortage of training data.

In this session, I’ll talk about tackling these issues through decoupling of content selection and surface realization. I will explain a supervised optimization framework for content selection for separating important and redundant sentences from source documents.

When writing a summary, humans tend to choose content from one or two sentences and merge them into a single summary sentence. I attempt to model human methodology by selecting either a single sentence or a pair of sentences, then compressing or fusing the sentence(s) to produce a summary.

In an era of information overload, the objective of text summarization is to write a program that can reduce the size of a text, while preserving the main points of its meaning. Automatic text summarization is an extremely active field in research. One important task in this field is automatic summarization, which consists of reducing the size of a text while preserving its core messaging.

Constructing a summary is a complex task, which involves Natural Language Processing. To simplify the problem, researchers are focusing mainly of these two types of summarization:

- Extractive summarization: The algorithm selects the most meaningful sentences in an article and arranges them in a complete manner. The resultant sentences are extracted from the article without any modifications.
- Abstractive summarization: The algorithm paraphrases the most important sentences in the article. This method employs sophisticated NLP and lexical analysis of the text.

An automatic summarization process can be divided into three steps:

- Pre-processing the text to clean the text of stop words, perform stemming and lemmatization.

Saurav is a senior content and community lead at Adobe, Bangalore, with more than a decade years of industry experience. Saurav is interested in enhancing content performance and optimization using Machine Learning and other predictive algorithms. In his current role, Saurav uses NLP and automation to extract trends and mine important information from customer data. Saurav is a regular speaker in R and Python conferences and meetup, and is a founding member of Bangalore R Users' Group.
In automated document summarization, the process can be extended to the following:

**Single-document summarization**: Summarizing a single, stand-alone document. For example, PDF document, research abstract, and so on.

**Multi-document summarization**: Summarizing a collection of documents and extracting a summary that includes important pieces of content from across documents.

**Automatic text summarization** also ensures that the topical sanctity of the corpus is maintained and there is no compromise on the logical structure of the output.

This approach is widely used in both academia and industry. The following are a few typical use cases of text summarization:

**Media tracking**: There is always the problem of plenty with information in media and news outlets. Automatic text summarization condenses the vast inflow of information to consumable bits.

**Company newsletters**: Most corporate newsletters contain curated articles from various levels of company stakeholders. Using text summarization, one can condense these articles into shorter forms of content, which could be viewed optimally in devices.

**SEO**: Summarization can analyze search queries, identify trends, spot the more important themes, and get an idea what keywords your competitors are using.
Knowledge base: Internal knowledge can be leveraged and can be presented to give employees better understanding of the company's strategies. Text summarization can achieve this and promote a more transformative, feedback-oriented environment.

Finance: Investment banks and retail banking organizations use text summarization to summarize their annual reports, shareholder reports, etc. and stock trends, among others.

Legal: A decent text summarizer can wade through extremely difficult legalese and can present a more simplified version, so that the reader can spot important clauses and compare various agreements.

Social media: Text summarization can convert long form content and share them as consumable bits to various social media platforms.

Conversational interfaces: Bots and conversational services can break volumes of text and present a summarized version of the same. This is helpful when a customer is interacting with a tech support bot.

Medicine: Summarization is crucial in telemedicine and extracting the most crucial information from volumes of patient data.

Patents: A text summarizer can crawl through thousands of patents of a particular discipline and extract the most important bits, so that a researcher can fine tune his/her area of focus.
Automating Technical Writing
Swati Damle, Sachin Shenoy

Abstract: We EVOLVE only through CHANGE. However, for us to evolve, we need a change of focus in the way we approach the technical writing profession. We must focus to maximize our ability to add value to the product documentation.

In the software industry, we all get influenced with buzzwords like automation and innovation. In technical writing, automation of mundane tasks such as authoring and editing of release notes, system requirements, integration and upgrade guides, are key to saving a lot of time to make meaningful docs.

This session will help the audience identify the automation trends that are going to impact our day-to-day work, evaluate the efficiency gain, identify the changes required to our processes, and develop meaningful automation strategies.

Technology is changing at a rapid pace, and possibilities are infinite. The only way to deal with the resulting disruption is to move higher in the value chain. We need to EVOLVE.

Based on the latest surveys of adoption of automation, analytics, and robotic automation within Software Development teams, technical writing function has the least adoption. The load on technical writers is increasing each day. However, a deep dive into the actual work keeping us busy clearly shows that load is not equal to value.

This session will help the audience identify the automation trends that are going to impact our day-to-day work, evaluate the efficiency gain, identify the changes required to our processes, and develop meaningful automation strategies.

Almost all user documentation for software products can be grouped under the following heading:

1. Release Notes
2. Getting started
3. Install
4. Upgrade
5. Integrate
6. Administer
7. Use
8. Troubleshoot
9. Develop

Almost all of these documents can be automated. 80% of these can be created without having a technical writer.

During the presentation, we will go over each of these grouping to explore how they can be automated. We will share examples and samples from our own efforts in this area.
Does this mean the technical writer is not required anymore?

Of course not. We just need to focus on the greatest value that we are originally supposed to do.

1. Develop user personas
2. Understand the end user and their use cases
3. Develop end-to-end use cases for our products
4. User assistance over procedure/UI documentation

These fundamental activities are the starting points for all automation and also weaves that comprehensive bind for all components that can be automated.

We will discuss the obvious changes required and highlight how we are still a critical piece in this jigsaw. The need is to shift our focus.
Building human centered brilliance

Sadhana Suresh

Abstract: With emerging technologies, Technical Writers aren’t any exception today. We need to hone our skills and catch up with the evolving capabilities. One of the fast growing and future significant things that everyone is focusing on is Artificial Intelligence (AI). The motto of AI is to build machines that respond like humans. In this presentation, we bring in Design Thinking practices in building artificially brilliant machines that are centered around human behaviour. Do we at all need Technical Writers when AI driven products are human centric? Do these brilliant machines eradicate the need for Technical Writers in AI? The presentation does answer these frightful questions. We will also learn how Technical Writers can bring in usefulness in building AI machines and writing intelligent content.

Ain’t stopping us now from wearing multiple feathers in our Tech Writer cap. We are building brilliance with our writing skills teamed up with Design Thinking practices and effortlessly flowing quality to think from the user’s point of view. What more than these 2 strong skills set we would need in contributing to our product team to build an outstanding AI machine that serves best to the user’s needs and caters to human emotional satisfaction.

We discover how we can put together Design Thinking principles to understand user persona and empathy maps. We unleash the mechanisms to involve with engineering teams right from beginning phase to create an AI essential framework. We will also learn how we can evolve to write for AI and figure out methodologies such as context based and human centered authoring, so we gear up for the future of writing. We achieve all this brilliance while we articulate the AI strategy to amplify human cognition and not replace humans with AI.

With many emerging technologies out there today, Artificial Intelligence (AI) is one among those booming mechanizations that is progressing rapidly. Every product company want to build machines that are artificially intelligent, works, and responds like humans. As Technical
Writers, we always play a vital role be it manufacturing, aeronautical, or software-based products. Hence, it is important for us to prepare ourselves to contribute in building and writing for AI products. User experience is the prime factor for a product success and with AI focus on human centered approach, it is vital for Technical Writers to understand and embrace Design Thinking application in building AI brilliant content.

**Why AI and what is AI**

AI adds intelligence to any existing products. For example, Siri feature is an add-on to an existing Apple product. AI improves human life as you can build brilliant machines with AI capabilities that respond and connects with humans. AI driven machines learn from the surroundings, patterns, and capable of learning for themselves with machine learning algorithms. Hence, every business model wants to reap the most of AI.

AI is about using a computer or a machine to perform human level activities and building human centered brilliance in machines. The AI capabilities include speech recognition, pattern recognition, machine learning algorithms, and language translation. As Technical Writers, we need to learn the AI mechanism and how we articulate documentation for AI products based on speech recognition, language translation, artificial bots, and so on. The technology is vast, and to start with, we Technical Writers must get the basics right and master skills in Writing brilliant content for AI.

**Technical Writers role in building human centered brilliance**

Technical Writers add great value to the product success by playing an excellent role as technical communicators, user experience designers, product quality validation, and many more. With AI growing at fast pace, there are frightful questions that are making noise if this technology eradicates the need for Writers or any need for content at all for AI brilliant products. Let us take a sigh of relief as AIs are not here to replace Technical Writers or need for human centered content but to build human cognition. But the style of writing and approach to write for AI is different. We will shed some light on this writing style in the conference.

With emerging AI, we will learn in this conference how Technical Writers can add value in building human centered brilliance. We will discover the following in the conference,

**High level**

- Niche skills we Writers need to write intelligent content for AI.
- Methods to collaborate with engineering teams right from beginning phase of planning to build AI.
- Applying Design Thinking to uncover assumptions (User Research, Empathy maps, Persona Sketch) in the product offering and key areas where there is need for content.
- Future of Technical Writers in the AI world.

**Deep dive**

- Writing intelligent content for AI driven products like Alexa, Siri, and chatbots.
- How to create user conceptual model (UCM) based on user patterns and user interactions.
- Shift from content-based writing to context-based writing.
- Write content that speaks like human, empathize users. We will discover this type of writing with examples.
- How you as a Writer can use AI to research on user context and future predictions.

**AI framework and application mapped to a use case**

The AI framework is about aligning yourself with the team to build an AI experience. We will learn details about AI framework, applying this framework to a business use case and how Technical Writer contributes in this AI journey.

**Intent:** Derive the intent of your business around user needs and determine why you need to embrace AI, or how embracing AI aligns with the user and business intent.

**Data:** Determine the data that you need to build the AI machine. Align the data analysis in compliant to GDPR and data privacy guidelines.

**Understanding:** Train your AI to learn from the data you feed in. Analyze and pitch methods how you teach the toddler that is called AI to understand your user needs and product you are building.

**Reasoning:** Prepare a blueprint of how you map the product building and documentation for AI. Have every detail that is backed with data reasoning and clear from any assumptions.

**Knowledge:** Keep in mind that the product and documentation you are building is a long-term solution and empowers your user experience. Build an intelligent knowledge base for the AI to scale up with time to meet user needs.

**Conclusion**

Ain’t stopping us now, we are scaling up with the emerging technology AI and honing the skills that are needed to build innovative machines and brilliant content. We learn Design Thinking application in AI and build AI content that is context-based and human centered.
Digital Analytics @ User Assistance

Karunaharan V

Abstract: As a technical communication expert, do I really communicate to my intended audience? Is the user assistance I provide consumed? If it is, who, when, where, and how is it consumed? Is it serving its purpose? What is the most important question from my customer? What is the preferred communication medium? Am I focussing energies on content that is never consumed at all?

And the most important question – how do I find answers for all the above questions?

Along with the traditional methods, a couple of years back, we at SAP introduced usage tracking technology – digital analytics for our online SAP Help Portal. This presentation focuses on how digital analytics helps technical writers, managers, and translators to take informed decisions about their user assistance. We identified patterns in the customer engagement with SAP Help Portal, converted them into actionable insights, and improved the customer experience. Yes, we didn’t just stop with conceptualization; we implemented.

The presentation covers in detail about:

- Need for digital transformation of help content
- Current capabilities of digital analytics with real-time case studies and implementations from SAP User Assistance
- How the technical writing community contributes to a framework for digital analytics
- How a technical writer can add value to product development

Takeaways for the participants

- Realize that web analytics for digital help can help them
  - identify what are the most important needs of the customers
  - identify if their help content is serving its purpose
  - identify if energies are focused on right areas of technical writing
  - gather data, which in turn, help product developers to improve the overall experience

Karunaharan is a User Assistance Developer Specialist at SAP Labs India. Part of the SAP Cloud Platform team since he joined SAP in 2016, he creates user assistance for various cloud-based SAP products like API Management, Web Analytics, Document Management, and Mobile Services. An undergraduate in Aeronautics, he was an Aerospace Technical Writer for 5.5 years at Capgemini where he used to develop user assistance for Bombardier Aerospace. He has been part of the digital analytics project for UA at SAP for more than 2 years. A sought-after UA analytics trainer across globally distributed SAP locations, he contributes towards gathering requirements for reports, creating and distributing reporting solutions, leading a team of power users, and delivering analytics related training.
lot of us have been writing since ages. What started off with typewriters, moved to prints from computers, became PDFs, slowly transitioned to online help, mobile help and have finally become digital assistants. Never know what is in the future store. https://www.stc.org/about-stc/ goes on to say that “… however, the professional field was firmly established during the First World War, growing out of the need for technology-based documentation…”.

The important question now is – can technical communicators stop with a “fire and forget” exercise? For a better customer experience, it is not just the intuitiveness and effectiveness of a product that matters, everything around it does too. After publishing the help content, it is essential to measure two things – the use and the usability of the help content. We can write quality content and review it against highest writing standards. But what value does it add if customers don’t use it or if it is not an effective help.

As a technical communication expert, what must matter to us is do we really communicate to our intended audience? Is the user assistance we provide consumed? If it is, who, when, where, and how is it consumed? Is it serving its purpose? What is the most important question from our customer? What is their preferred communication medium? Are we focussing energies on content that is never consumed at all?

And the most important question – how do I find answers for all the above questions?

That’s why, getting customer feedback is critical. And it is very difficult. Customers might not always be motivated to give feedback.

What did we do?
SAP realized traditional ways of delivering help content is not the way to exist in the digital transformation era. We moved all our user assistance to one place – SAP Help Portal – a single point of information source for all SAP products. And this portal keeps evolving everyday based on the customer needs.

What was the next small step?
Having all the above discussed points in mind and keeping a constant pace with the traditional methods of feedback, a couple of years back, we at SAP introduced usage tracking technology for SAP Help Portal with web analytics tools available in SAP and external market.

What was the next big step?
SAP User Assistance formed a group of technical writers who became the Digital Analytics expert group. Responsibilities of the group included but not limited to – rolled out to every technical writer at SAP about analytics for user assistance, reached out to every group to gather their requirements, brainstormed to convert the requirements into analytics resources, extended web analytics to every technical writer, and improved the user assistance with the available insights. Yes, we didn’t just stop with conceptualization; we implemented.

What was the final step?
Adoption – because having a well-informed analytics process in place doesn’t help. The effectiveness is achieved only if the technical writers in the organization make the most out of it.

Was adoption really the final step?
Nah. Derive actionable insights from the analytics data, improve the content, and keep measuring. This is a never-ending cycle for user assistance developers in SAP. Oh yeah, the analytics group keeps evolving too.

This presentation focuses on how digital analytics helps technical writers, managers, and translators to take informed decisions about their user assistance. We identified patterns in the customer engagement with SAP Help Portal, converted them into actionable insights, and improved the customer experience.

The presentation covers in detail about:

- Need for digital transformation of help content
- Current capabilities of digital analytics with real-time case studies and implementations from SAP User Assistance
- How the technical writing community contributes to a framework for digital analytics
- How a technical writer can add value to product development

The presentation doesn’t cover:

- Details of implementation at SAP which the audience might not be interested in

Takeaways for the participants

- Realize that web analytics for digital help can help them
  - identify what are the most important needs of the customers
  - identify if their help content is serving its purpose
  - identify if energies are focussed on right areas of technical writing
  - gather data, which in turn, help product developers to improve the overall experience

SAP presented the same topic at one of the STC India Bangalore Learning Sessions. The 45-minutes-to-be session went beyond 70 minutes. Because the audience wanted to see and know more, and eventually, Q&A session lasted more than the actual presentation. This time, hoping to address a larger group of audience.
Documentation Metrics - Why, What, and How?
Sangeeta D. Kataria

Abstract: Why do we need metrics for documentation? A lot has been written about metrics and technical communication. Many technical writers have been asked to define meaningful metrics, because of requirements imposed by managers either to prove the qualitative value of documentation or resource needs. One of the goals with metrics is to connect documentation outcomes to measurable values. This will enable technical documentation teams to demonstrate their contribution towards product success and project ROI in a quantitative way while discussing with senior leaders in the organization.

What metrics must be tracked for documentation? Here, without directly getting into documentation metrics, I would first like to explain the popular AAARR framework, which is used to track product metrics and draw a parallel from it to documentation metrics. I will explain which metrics from that framework can be mapped to track an online documentation website or even the regular PDF deliverables. I will also cover how you can group similar documentation metrics and present the metrics data more effectively to their stakeholders. This will help technical communicators, especially team leaders and documentation managers to showcase both quantitative and qualitative values provided by their documentation to their customers/end users.

How do we track the documentation metrics? Best way to track documentation metrics is via usability tests. Depending upon your documentation deliverables, whether it is online or offline, new or legacy, the usability methods can be identified. Once we choose the methods, I will explain how one can track metrics using that method and suggest the tools that are currently used in the product space that can also be used to measure documentation metrics. I will explain this with an industry example and apply the methods and tools on it and demonstrate the process of gathering documentation metrics.

Sangeeta D. Kataria has 15+ years of experience in the software products industry, wherein she has played multiple roles, such as project manager, information architect, and technical writer for creating product documentation for varied domains. A Certified Usability Analyst (CUA) from HFI and an IBM Enterprise Design Thinking Practitioner, she is passionate about creating user-centric deliverables. In her journey, she has dabbled with API documentation, building online Knowledge Bases, migrating from Word or FrameMaker to DITA or Flare, and creating user workflows, UX design, and business proposals. She is a regular speaker at STC India sessions and conferences and also volunteered as the STC Mumbai City Representative for FY 2019.
Introduction:
Lately I have been trying to figure out the right metrics for my role as a technical communicator. The need to identify the documentation metrics arises either because of a requirement imposed by managers to prove the qualitative value, bandwidth constraints, or hire more resources. One of the common goals with metrics is to connect writing outcomes to measurable values that will enable technical communicators establish value in a quantitative way while discussing with senior leaders in an organization.

WHY should you track metrics?
Before getting into the process of identifying and tracking documentation metrics, you as a technical communicator must try and understand the WHY and NEED for such metrics. Do you want to track your team’s productivity? Have you recently launched a new documentation portal, or moved from PDF to HTML based deliverables? Or are there many customer complaints for your existing documentation? Or you simply wish to track documentation effectiveness and quality?

WHAT metrics should you track?
The analysis from the above step will enable you to identify the documentation metrics relevant and applicable for your business and user requirements.

Commonly tracked metrics for documentation deliverables are:

- **Number of support calls and associated costs**: Be it a software product or services or hardware organization, increasing support calls and costs associated with it are always a concern. Support teams need to meticulously track the number of calls coming in, number of calls per product, and the estimated cost of each call. Product documentation many a times is expected help customers use the product more easily and effectively and thus help reduce the customer support calls.

- **Documentation survey results**: Surveys allow you to measure documentation effectiveness and quality after user interaction. Were users pleased with the help material? Did it increase usage and adoption of the product? Surveys being anonymous help the users share their feedback more openly.

- **Helpfulness ratings inside help topics**: Another technique might be to embed a "Was this topic helpful?" question in your documentation. Then count the number of people who indicated that the topics helped them. You could measure your own success based on the number of yes responses versus no responses. If you equated each "yes" response with the cost of a support call, you could make a case that documentation is saving the company that amount in support costs.

- **Page hits**: Page hits to online help topics help you identify the topics that are being hit frequently by your product users. As a technical communicator, you can analyze this behavior to conclude if some product areas are complex and can be better documented by adding infographics or videos in those topics.

Most of the software organizations use the **AARRR (Pirate) framework** to identify and group the metrics for their products. I will explain this framework and type of metrics that it suggests for software products and create a parallel mapping for the documentation deliverables. One of the benefits of this method will be that your stakeholders will mostly be familiar with the AARRR framework and more willing to use the methods under the framework, especially since no new costs will be involved.
**HOW do you track metrics?**

Based on your user requirements and the type of metrics to track, you will need to choose appropriate usability methods and tools for your chosen methods. Here too, you can use the methods and tools that you are used for products in your organization.

Some of the usability methods from the product space that I think can be applied for tracking documentation metrics are as follows:

- **Heatmap testing**: This method can be used to understand how a user uses and browses your help page. If you have introduced a new landing page in your online knowledge base by involving UX and UI resources and you need to understand how this page is being used by your users, then this method is effective. This method can also be used to track the user movement in existing help pages.

- **A/B or Multivariate testing**: This method is frequently used by product managers to track product success. Here too I will cover scenarios in the documentation where this can be applied, and relevant metrics can be derived which can be showcased and analyzed for improvements.

In addition to the above, I will also explain other methods, such as segmentation and funnel analysis from the product space and how they can be mapped to test and track documentation metrics. Specific documentation use cases where each method will be relevant and applicable will be discussed.

Based on the methods that you have identified for tracking metrics, I will explain the tools that can be used for each method. These tools will also be the ones that already exist in your organization and are used for tracking products’ metrics.
Emotionally Intelligent Digital Content: How Empathetic and Automated Interfaces Amplify User Experience

Nisha Rajan

Abstract: With humans consuming most of their time online – either for pleasure or work – social interaction has depleted. The need for conversational interfaces rose because customers enjoy having an interactive learning session as opposed to a solitary one. Gone are the days where users read a 400-page manual to understand why the product is not working as expected – customers need instant results. While traditional technical writing is still a part of the product life cycle, its days are numbered. The world is moving to the cloud, with intelligent systems and automated processes. It’s only a matter of time until these concepts are adapted to the technical communication sector.

Some of the emerging trends are discussed in this paper. The goal is to exceed customer satisfaction and help users understand features, content and tasks by providing fast and efficient solutions.

Most of the topics discussed in this paper have been incorporated at Epicor and have proved to be a game-changer in the user’s learning experience.

Change is imminent and invincible. Being adaptable to change and exploring new avenues to heighten a user’s learning experience must be the aim of any new technical approach.

H i there! Internet of things, informal interfaces, intelligent machines are some of the terms we hear or read about daily. How exactly can these concepts be used in the field of technical communication? Let us look at some of the new kids on the block.

Talk techy to me:

Nisha has 4+ years of experience in the IT industry. She started her journey as a developer cum writer and soon realized that she wanted to pursue a career in the technical writing field. She now works as a digital content developer at Epicor, finding creative and innovative ways to make the learning process a fun and interactive experience for the end user. In her free time, she likes to research on behavioral analysis, psychology, new trends in the tech industry and binge-watch crime serials. She is a first-time speaker.
Did I get your attention? Good, that’s what I want. When I was researching ideas for this paper, I came across so many technical terms that shifted my focus to understanding what the word meant rather than reading the actual content in the paper. We all spend numerous hours staring at a screen for work or pleasure. Whatever the reason, human/social interaction has drastically reduced. Most customers prefer reading an informal document because the experience is better. It’s basic psychology. We replace most of our human conversations with a machine; the machine is a colleague – Imagine sitting next to a co-worker named Dully who gives strict, monosyllabic and indifferent replies to your questions. So dull.

Now, imagine sitting next to a co-worker named Chatty. Chatty gives enthusiastic and friendly responses to your concerns. Doesn’t that make your experience better? Wouldn’t you want to approach Chatty if you have a hard time understanding a concept at work?

A conversational style of writing is key in making customer learning a fun and effective process. We all know happy customers lead to loyal customers. The rule of thumb is to not be so funny that you end up offending someone – not cool, bro.

You can find me, wherever you are:

It’s your second day at work, you’ve met the team, received the locker keys and responded to Welcome e-mails. Your supervisor stops by your desk and tells you that there is a lot of work to be done. You are calm and collected. He asks you to document an issue that most customers face while setting up defective policies in the system and their relation to freight and weight proration.

WAIT... What? These are a bunch of techy words that you aren’t sure of.

Your supervisor leaves before you could ask follow-up questions. You proceed to ask your team members for help – unfortunately, some of them are in meetings. The only one present at her desk can’t help you right now because she is dealing with a production bug.

After a few e-mails you get the access to the help document. You open it, it’s 800 pages long so it takes a while. By the time you find the information you were looking for, you realize it has 10 other new concepts attached to it. Sound familiar?

Instead of going through the huge document, wouldn’t it be simpler if you had a virtual friend taking you where you need to go?

In-app or In-product guided learning is one of the front-runners in the technical communication spectrum. Customers prefer interactive and efficient learning procedures to understand the product or a specific task. This is helpful when customers want to move through numerous modules and can’t search information on each of these in a huge document. The in-app help provides context specific information.

You’ve got a friend in me:

Consider the same scenario mentioned above. Instead of waiting for access to information, imagine if your virtual buddy helped you. You save time and effort... and make a friend!
Chatbots are taking the IT world by storm. If you’ve ordered from Swiggy, you would’ve notice that before getting in touch with support, the bot asks specific details about your issue. This simple step saves a huge amount of time and resources. Though this scenario is related to the support department, chatbots can help in the field of technical communication as well. You can use bots to search for information in a large document, automate processes or connect users to valuable videos and articles.

**Polly wants a cracker:**

No, I’m not talking about Polly the parrot – this is Amazon’s text-to-speech service.

In Bangalore, almost everyone spends an average of 2 hours a day for traveling to their office. Now, imagine you need to learn about a feature of your product/application while driving. You can’t possibly read about it. But, you can listen.

Or how about a technician who has his hands full while changing servers? It’s easier to listen in situations where it’s difficult to read – making learning a time effective process. This approach can be used for providing learning material to visually-challenged individuals as well.

These are some of the prominent trends in the technical world right now. While these may not be traditional, we must remember that change is imminent and inevitable. At the end, it’s about customer satisfaction, interactive user experience and continuous learning.
Experiment in the field of Technical Communication to Understand the Effectiveness of Memes in the Learning Process of Technical Communicators: A Case Study

Anand VM, Ria Castelino

Abstract: Information perceived through visual techniques, which stimulates the capability of the individuals to assimilate data is Visual learning. Visual learning uses the help of images, videos, graphs, cards, etc., to enhance the individuals’ attention and assist in learning. Memes are one of the visual tools circulated in social network sites for various entertaining and critiquing purposes; with much popularity in online communication, memes are looked upon as entertainment pieces. This paper focuses on understanding the effectiveness of memes in the field of technical communication. The study is to investigate the effectiveness of memes on the cognitive thinking of a group of volunteered technical writers, in a business solution company, using Gestalt psychology. The volunteers for this investigation were provided with memes as visual illustrations to introduce a distribution software, to complement oral and verbal instruction, and measure their learning efficiency at the end of the research. The data is collected in the form of questionnaires, quizzes, and interviews.

Keywords: Memes, Cognitive psychology, Visual learning, Software learning, Visual Illustrators.

Anand VM has 1 year of experience in the IT industry. He is currently working as a digital content developer at Epicor. With his video/gif making skills, he focuses on finding creative ways to merge visual and technical communication, trying to make the entire process of learning very interesting for the users. He is a first-time speaker. He is extremely fond of making short films in his free time and also has his own YouTube channel. And he loves playing video games.

Information perceived through visual techniques, which stimulates the capability of the individuals to assimilate data is Visual Learning. Visual learning uses the help of images, videos, graphs, cards, and so on, to enhance the individuals’ attention and assist in learning. It is observed that 75% of the information processed by the brain is derived from visual formats Williams (2009). Learning has evolved over the years. Learners have moved from a more generic way of learning to using visual aids for better comprehension. Memes, without a doubt, are one of the visual tools circulated in social network sites and
messaging software for various entertaining and critiquing purposes. Reime (2015) believes memes are, “…visual tools made their way into parts of written communication long before live video streaming became accessible for the public domain”. They have been used as tools to share radical ideas, to express political views, social norms, and for entertainment. They have been looked upon as entertainment pieces. The study is to investigate the effectiveness of memes on the cognitive thinking of a group of volunteered technical writers, in a business solution company, using Gestalt psychology. Gestalt psychology proposes that learning for an individual happens when he/she could relate the subject to experiences. The study focuses on understanding the effectiveness of memes in the field of communication. “Visual learning is as fundamental to good technical communication as appropriate use of words in reading and writing” (Cargile Cook).

A group of technical communicators volunteered to be a part of this study. A distribution software was introduced to the group through memes as visual illustrations to complement oral and verbal instructions. The templates of previous and current viral memes were designed accordingly for learning/teaching purposes of the distribution software. The memes were in English and did not involve any of the regional/vernacular languages of India. The researchers made sure that the group does not have a prior knowledge about the software. The group of volunteers are active in social media sites and are aware of what memes are. The data is collected in the form of questionnaires, quizzes, and interviews. The data is used to measure their learning efficiency at the end of the research with the theoretical framework of Gestalt psychology. The data is used to understand the comprehension, retention level of the learners about the aspects of the distribution software that were taught during the part of the research.

**Possible outcomes**

The group of learners will not be able to understand the aspects of the software (if) the provided visual illustrators are not relatable. The learners might be able to remember clearly about the aspects of the software because visual learning helps visual thinking. Visual information is mapped better in students’ minds (Williams 2009). Learners might be enthusiastic to learn new with the assistance of memes complimenting verbal and oral communication.

**Limitations**

Ria Castelino has 1.4 years of experience in the IT industry. She completed her Masters in English Literature and was always interested in pursuing a career in the technical writing field, hoping to have a blend of both, the technical knowledge of a product and effectively conveying it to the users. She is working as a technical writer at Epicor, documenting a retail software and is very passionate about finding innovative ways to make strenuous procedures interesting and easy to understand. She is a first-time speaker. In her free time, she loves reading books, mystery novels are her favorite.
The research is limited to the group that is aware of social networking sites and the trending viral memes. The research is limited to technical communicators in the field of business solutions. The research includes memes as visual illustrations in addition to the verbal and oral communication to educate the learners about the distribution software. The research does not include memes designed in vernacular/regional languages.

Further studies

The paper opens new ground for further researches. Studies can also be investigated the aspects of how the generation of millennials found memes relatable to their lifestyle. There can be a study on how memes can itself be a language in the world of Internet. There are possibilities for a further scope in analyzing the language of online communication and what role does memes play in it. A research can be done on how students react to memes in their curriculum if they are particular to their region movies. Cognitive thinking, behavior attitudes, and retention level of the students can be researched. Further research can be concentrated on how irrelevant memes when introduced to a group of learners who aren’t a part of online communication or any social networking sites.

References:


Featurettes the future
Princy Helmina Melchius, Deepali Chatterjee

Abstract: Words are a highly potent medium to create a lasting impression. This is truer when you’re writing something that your reader will use to solve a problem. We need to understand that any user who turns to technical documentation does not do so out of choice. More often than not, it is due to coercion. The user, in all likelihood, is frustrated and needs to find a solution very quickly. Research by Nielsen echoes the same thought. Readers don’t read. They scan the document. Our product documentation needs to move away from being dry, clinical, and robotic. Long procedures are time consuming and confusing for the end users to follow. As they say, “A picture speaks thousand words”. An engaging video is easy to understand and retains the attention span of the user. It would be helpful if the user can watch the video of the procedure.

Featurettes are quick, engaging video clipping that can be a task, a concept, a what’s new demo, or any customer focused demonstration of our fabulous product. Short and crisp featurettes help in branding, can be scaled to any level, and are of course engaging.

Featurettes can be:

- Embedded as a video in our product documentation.
- A separate listing as How tos.. on a product specific landing page.
- A demo for POs reaching customers.
- A sales pitch on how great products are!

Writtten communication is a strongest form of communication. It cannot be altered without being noticed as in a verbal communication. Words are a highly potent medium to create a lasting impression.

We use various forms of written documents, starting with letters, journals, novels, study materials, manuals, and the list is endless. In our IT industry, documentation plays a major role is user engagement, be it a process, a product pitch, or a simple task, the minute details are captured and documented.
Now, are all documents useful? The answer is: It is situational. We do not want a user to go unanswered. The result, documents became lengthy with too much information to take. This does not give a great user experience. We want the user to get what they need quickly and with clarity. This leads to providing an engaging documentation. Readers don’t read. They scan the document. Our product documentation needs to move away from being dry, clinical, and robotic.

Adults and kids alike love visual communication. Teaching and training industries are moving towards storytelling. So why not documentation? As they say, “A picture speaks thousand words, a movie gives a lasting impression”. Reading long procedures are time consuming and confusing for the end users to follow. An engaging video is easy to understand and retains the attention span of the user. It would be helpful if the user can watch the video of the product feature, a troubleshooting procedure, or a how-to-do task.

Featurettes are quick, engaging video clipping that can be a task, a concept, a what’s new demo, or any customer focused demonstration of our fabulous product. Short and crisp featurettes help in branding, can be scaled to any level, and are of course engaging.

Let us take an example of Release notes. The main points that we cover in this document are:

- What’s new in this release
- What existing features we enhanced

Imagine, having a short video of what’s new in this release. Wouldn’t it be easy to relate and engaging? You can show a quick demo of the new features and what enhancements were made to the existing features. This way the document becomes engaging and the user exactly knows what is been offered. This idea can be scaled to any kind of documentation the we deliver. A simple video capturing tool is all we need. And, as writers, we are sure to nail the contextual texts that go with it.

Featurettes can be:

- Embedded as a video in our product documentation.
- A separate listing as How tos.. on a product specific landing page.
- A demo for POs reaching customers.
- A sales pitch on how great products are!

As a conclusion, Featurettes can be a solution to an engaging next gen documentation.

Deepali Chatterjee is currently employed with ServiceNow as a Staff Technical Writer. She has worked as a writer with companies like HSBC, Avaya, and Qualcomm in the past. She holds a doctorate in English Literature where she explored the world of Gabriel Garcia Marquez. She started her career as copywriter and was initiated into the world of technical writing quite by chance. She hasn’t looked back since and has been in the profession for 12 years where she has trained junior writers on a variety of aspects such as eliminating Indianism in writing, writing effective quick start guides and so on. She loves to read and lives to travel. Her ultimate dream is to do the CELTA course and teach English around the world.
Get the User on Board

Sangeeta Raghu Punnadi

Abstract: With the advent of technology, new products are launched every day in the market! Every product wants user attention! How do we get our product noticed? Of course, great functionality, but what if the user cannot figure out how to use the product! Don’t worry, we solve this problem with USER ONBOARDING!!

User onboarding is guiding users to use your product and find value in it. The primary goal of user onboarding is to ensure that the users reach their “Aha” moments. “Aha” moment is the first time your user recognizes value in your product or in a product feature.

Users read marketing, help content, and promotional emails while researching the market for a good product. This content is the first step towards a good onboarding experience. In your product, continue the onboarding. Welcome screen, overlay, tooltips, guided tours, progress bars, and so on, can be used effectively to provide the right onboarding experience at the right time.

But don’t overdo the onboarding. We don’t want to turn onboarding into overboarding!

We will see examples on what kind of onboarding to use in which scenario. We will discuss how to use a mix of the following onboarding channels to create a good experience.

Sangeeta Raghu Punnadi has been in the TechComm domain for last 15 years. During her journey, she has donned various hats. She has worked extensively on API documentation. She has also worked on almost all types of documents involved in DDLC. She tries to contribute to other types of content apart from help documentation. She has worked closely with other teams to create non-traditional content, such as, microcopy, user onboarding flows, readmes, code messages, and so on. She enjoys sharing whatever new she has learnt and tries to present in various conferences.
Technical communicators can contribute in every stage of user onboarding. Content creation for web and user interface and creating interactive guided tours on the product are a few areas where we can contribute. We are important stakeholders in this space with significant contribution. This session covers:

- What is user onboarding?
- Advantages of user onboarding
- Onboarding based on user personas and journeys
  - User Type
    - First time users
    - Basic users
    - Advanced users
  - Role
    - Administrator
    - Specific roles
- User onboarding channels
- Examples of companies who use good onboarding to guide their users
- Onboarding tools that you use to get started
- Demo of one of the tool to get started

In a world full of competition, what sets your product apart from your competitors? A good user experience!! How do you ensure a good user experience? Well, all you need is a combination of functionally good product, good UX, and good user onboarding. In a market space where every product
wants user attention, the first impression of your product goes a long way in user loyalty. Help the users get started!! Give them a good **USER ONBOARDING** experience!!

What is user onboarding? User onboarding is guiding users to use your product and find value in it. The primary goal of user onboarding is to help the user achieve their “Aha” moment, the moment when user realizes the value of your product or feature.

Users read marketing and help content while researching the market for a good product. This is where your user onboarding starts!! In your product, continue the onboarding, guide the users to get started. Welcome screen, overlay, tooltips, guided tours, progress bars, and so on, can be used effectively to provide the right onboarding experience at the right time. We will see examples on what kind of onboarding to use in which scenario. Depending on the user personas and user journeys, you can create different onboarding experiences.

We as Technical Writers can contribute to various channels of onboarding experiences:

In this session, we will discuss:

- What is user onboarding?
- How to create good onboarding based on user personas and user journeys?
- Discuss various onboarding channels, such as, emails, welcome messages, tooltips, blank states in product, interactive guided tours, and so on.
- Tools that can be used for creating user onboarding.
- And yes, we will also discuss where onboarding becomes overboarding!

See you at the session to onboard you on the onboarding process!!
How to overcome difficulties and create success stories: Delighting our customers.

Srirekhha Menon

Abstract: In Nokia, enhancing customer documentation based on customer experience has become the order of the day. We met the customers directly and understood what exactly they generally look for in a product document. Bridging the gap between the customer, customer facing team, and the documentation team was a herculean effort.

We enhanced the context sensitive online help, moved on to interactive workflows, and then to How-to Videos. Initially, customers were more interested in the context sensitive online help, which had an effective search mechanism for easy access of information.

Then we moved on to a more interactive deliverables like the interactive workflows and then to the “How to videos”. While the workflows provided an end to end understanding of the procedure, videos took the user through every step in a procedure.

Lot of research went into identifying the right audio and video editing tools. We presented the prototype to the product stake holders and documentation stakeholders first. We convinced the stakeholders about the usability of the videos and the cost and effort efficiency of the identified tools.

With a dynamic product and a constantly changing user interface; maintenance and establishing style and consistency became a tedious task for us.

The main challenge was when the R&D requested for a searchable video hosted on a YouTube like platform, where we needed to take care of security issues while delivering the product documentation.

Srirekhha Menon is a Customer Documentation Developer in Nokia, Bengaluru. Srirekhha Menon has more than 10 years of experience in technical writing. Prior to that she was a copyeditor in India Today. She has worked in various verticals of IT industry like Telecommunication, Networking, and Industrial and Manufacturing to produce user documentation. Her passion for writing and her inclination to learn and understand technology landed her into the IT industry. In her current role, she works on Optical Network Management and Control SW in close interaction with R&D. She also plays a key role in planning and strategizing the rich Media delivery.

She is a key contributor to all the enhancements and best practices followed in the Nokia projects. She has received many accolades and appreciations for her involvement in these activities. Her hobbies include reading books, travelling, and
Despite all the odds, we continued to work with persistence. Ultimately, now we have good words of appreciation pouring in from the customers and the product managers.

And we engage the customers with the age old saying: “What you see is what you get”.

Technical writing is into various new trends with the massive influence of software and digital technology. As a technical writer, we are juggling between being technical and being a writer.

To add to this, we cannot work in isolation now. With agile, we work along with the Product team to deliver the best results on time and every time.

In Nokia, we were into traditional documentation, like our age-old PDF and the html output bundle. Although we were delivering the documents in EPUB and MOBI, we felt it was not adequately serving the kindle or mobile users.

But slowly, we could see the change in customer’s attitude towards the product that we are working on. We understood that we need to make a paradigm shift in the way we deliver documentation for better product adoption. It was necessary to retain the existing customers along with inducting and integrating new customers.

We directly interacted with the customers and understood their pain points. We wanted to hear about their daily operations, to understand how we can best support the customer with the right and accurate information. Our interaction with the customer facing teams helped us to arrive at intuitive deliverables.

Initially, customers were more interested in the already available context sensitive online help for more easy access to information. To make it more effective, we ensured with the Product team that there is a Help icon in every window of the user interface. There is an effective search mechanism, developed with the help of good indexing, to find the relevant information.

That was just a tip of the iceberg.

From there we have now moved on to a more interactive deliverable. First the interactive workflows and then to the “How to videos”.

- Flow charts provide a one-stop solution for the provisioning procedures. With the help of hotspots, the users can navigate to the respective procedure in the HTML format. The end-to-end workflow of a feature and the transitions happening the user interface were captured in the form of interactive flowcharts.
- Videos are more interactive, educating the user on how to use a certain feature; with the Do’s and Don’ts.

With videos, lot of research went into identifying the right audio and the video editing tools. Lot of research went into identifying the right audio and video editing tools. We presented the prototype to the product stake holders and documentation stakeholders first. We convinced the stakeholders about the usability of the videos and the cost and effort efficiency of the identified tools. We had to build the confidence in them with our video proposal.
With a dynamic product and a constantly changing user interface; maintenance and establishing style and consistency became a tedious task for us. Initially, we were bundling the videos along with the HTML package and the users could access the videos from the online help. Because of the popularity it was gaining with product managers, the videos were integrated with the product and launched from the user interface. Finally, there was applause and acceptance from the stakeholders and the customers alike.

The main challenge was when the Product team requested for a searchable video hosted on a YouTube like platform. Hosting the product “How to Videos” on a YouTube like channel had its own challenges and concerns, like information security and being aligned with the company’s values. So, we hosted the videos on a Nokia private YouTube channel with restricted access.

Despite all the odds, we continued to work with persistence and ultimately, now we have good words of appreciation pouring in from the customers and the product managers.

There are a series of video requests from the Product team and the Customer facing teams. The Product managers are able to explain the feature to the customers with the help of videos.
Infinity Stones for Writers

Reena Titus, Subha V

Abstract: The hardest choices require the strongest wills. — Thanos

- With great power comes great responsibility. — Voltaire said it first. Later Uncle Ben in Spiderman.

Technical writing world balances between what the development team delivers for customers to run their business and present that deliverable in a way that customers can assimilate the information for better business functioning. Technical writers always walk on a tight rope towards the goal, constantly improving and dynamically evolving on the process, techniques, and technology for easy and fast assimilation of information for users. There is no doubt that our goal is to present information in the best possible way for our customers.

Technical writing industry does not operate only with what the Development team delivers, but there is a whole ambit of things in that orbit, which the writer must use to strike a balance upon for the right level of information in a fast-evolving world where none has the time or bandwidth to read all that is written.

Just as Thanos is on a quest for the six Infinity Stones, so is a technical writer always on a search for six gems or the soul gems of writing. Achieving one or two gems does not give you the perfect balance in delivering your information but getting all the six and in using them in a perfect balance gives the information in a best possible way. Just like a master chef, a good technical writer balances his/her ingredients in a way that achieves the best taste.

Technical writing is very different from any writing. We, technical writers, do not write to

- inform people,
- persuade buyers,
- entertain a mass,
- sensate readers as in poetry where feelings are given intensity, or
- inspire someone.

We write to get you to do what you want to do.
Overview: Information as a concept is time immemorial. However, information acquired a new status ever since the inception of Information Technology had become an industry by itself. There has always been an imbalance in delivering the right level of information between what the development team develops and what the documentation team delivers on the information – an ongoing struggle to keep up with customer expectations.

Traditional SDLC model gave enough time for the development team and the documentation team to strike a balance in delivering the right amount of information. But with the advent of fast-paced iterative development methods such as Agile, SAFe, and DevOps the time gap has narrowed down between the two teams, and the documentation team is also drawn into the fray of quick turnaround.

With the limited time in hand, technical writers have to understand the feature, sieve the right amount of technical information, input the required functional information, use the right topic template, follow the correct process, and employ the writing tools in delivering the information. Too much on the writer’s plate, right?

Come join us on a quest where we present you on the right-write balance drawing an analogy between the six infinity stones and the six principles in writing that is of paramount importance.

Just to give you a brief backdrop on the infinity stones: Before creation itself, there were six singularities, then the universe exploded into existence and the remnants of this system were forged into concentrated ingots: Infinity Stones. The infinity stones, six rocks of inexplicable power that combine to create exponentially more inexplicable power. In the smash hit Avengers: Infinity War, a team of superheroes comes together to defend the world from a threat they cannot tackle alone.

TWanos (our technical writer), as he embarks on a journey to hunt and collect the Infinity Stones for restoring a balance to the product documentation universe. In this quest, we will see how different Infinity Stones with their unique abilities can help him restore the balance and what it takes to acquire each Infinity Stone.

Reena Faith Titus, a self-made writer, aspired to become a lecturer but found an insatiable deeper avocation in writing, down the long-winding road of her career path. A voracious reader and an avid fan of classical literature, she graduated in Zoology from Women’s Christian College in Chennai, acquiring an MA in Political Science, and a Master’s in Philosophy (M.Phil). She has many a master’s degree to her credit. She started her career as an intern in The Hindu after completing PG Diploma in Journalism and Mass Communication. Moving on to become a Writer and Sub-editor in a small-time magazine, then a Copyeditor for Elsevier Publishing Company, soon to become a Technical Writer at Oracle India Ltd for a decade, she is now with ServiceNow for more than three years. Reena has many published articles to her credit and her forte lies in her expertise of documenting user’s and implementation guides in areas like Supply Chain Management and IT Business Management. She is a first-time presenter at the STC conference.
The Infinity Stones that TwWnos is looking for are:

1. Time Stone – Allows one to see in past and future.
2. Soul Stone – Power to control over all life in the universe.
4. Reality Stone – Allows you to fulfil the user’s wish and help them achieve impossible things.
5. Power Stone – Access and manipulate all forms of energy in delivering what user wants.
6. Space Stone – Power to teleport anywhere in the universe. Efficient in communication and collaboration, ability to connect with people at farther ends with the information they want.

A real-life parallel in the technical writing world is to become a successful writer with the right mix of professional skills. While we all have our unique abilities, personalities, and motivation, at work, some visions are bigger than one individual and some challenges are too major to face alone. By channelizing our talents, ain’t no stopping us now.

**Key Takeaway**

In this presentation, we’ll look at how each Infinity Stone provides maps to the skills useful for a technical writer for achieving success and balance in the development and documentation universe and say confidently “Ain’t no stopping us now!”
Information Architecture Basics for Technical Writers

Harry Antony

Abstract: Theme: Innovative solutions for ease of use

“How can you create a satisfactory user experience when your management is not ready to spend more on new tools? What you need to do to be innovative in solving your customer’s pain points? Will your new ideas be approved by SMEs, PMs and Management? How will you justify the changes that you are proposing?

These are some routine questions that comes to your mind when a technical documentation team proposes to change the way the product content is delivered to end users. Because top management and business needs does not permit you to modify legacy artefacts and age-old processes in a company. In this scenario you should wear an Information Architect’s hat and define a new paradigm for your technical documentation, which is based on information architecture principles. An Information Architect (IA) must be proactive and innovative to sell his/her ideas to various teams and get their buy-in by sharing the pros and cons of any changes that are proposed.

This paper/presentation focuses on innovative authoring solutions using the basic Information Architecture principles for product or technical documentation, which is published in PDF or Knowledge Base article formats.

This paper/presentation will cover the following topics:

- Why is Information Architecture important for technical writers?
- Understand Basic principles of Information Architecture
- Show some real-world examples
- Learn by sharing our own experiences

Harry Anthony is a Documentation Manager at InsideView Technologies, Hyderabad. Harry has over 18 years of experience in technical writing, wherein for 3 years he worked at SAP Asia Pacific Ltd, Singapore to acquire international experience. He is a trained DITA expert, Information Architect (IA) and PMP professional.

He has technical expertise in delivering the best user documentation for database management systems (DBMS), enterprise resource planning (ERP), social relationship management (SRM), banking, mobility, enterprise application integration (EAI), process manufacturing, customer relationship management (CRM), and supply chain management (SCM) products.

He has won numerous recognitions and awards for technical documentation at JP Mobile [now Motorola], Sun Microsystems, and Oracle Corporation. He writes technical writing blogs, travelogues, and mentors’ junior writers. He has presented at Hyderabad’s STC learning sessions and Oracle’s technology summit.
**Goal:** To provide some fundamental principles of Information Architecture, which you can use on a regular basis to improve your product documentation’s accessibility and usability for end users.

Technical writers are considered to be a clerical person who will produce standalone deliverables? Who will write just knowledge base articles? Publish documents when the release is nearing in PDF manuals or generate CHM files for online help or document quick-start guide if needed. However, our PMs and SMEs should be made aware of the fact that the documentation team follows stringent technical publication standards, use various documentation concepts (DITA), principles (Information Architecture), theories (reusability), tools (ixiasoft’s DITA CMS) and editors (Oxygen XML editor) to structure and present the information in aforementioned deliverable formats. See, how difficult is the job of a technical writer?

In technical writing, Information Architecture also known as IA is all about organizing, structuring information and presenting easy to use product documentation to end users, where they can find the content easily and use it via simple navigation page layouts. IA determines the scope of improvement in technical documentation, knowledge base articles, online help, and other content management systems with consistent templates, re-usability and re-structuring options.

Information Architects are needed to define a structure and plan content reuse strategies for technical communication teams who develop product documentation. As the amount of product information/content grows exponentially, organizations have thought about a paradigm shift from standalone-document to Information Architecture concepts and principles for usable and findable content for their end-users. Eventually, technical writers are taking a leap from being just a technical writer to an Information Architect, which has become a clear choice of career progression. With cohesive and sustainable content strategies, Information Architects are now becoming a must have member for any documentation teams who want to reuse content and reduce overhead and avoid duplication of topics and sections.

The information architect bridges the gap between the technical communication and end users by defining structure for an organizations’ product content and introducing templates to present content to its audiences. Information Architects are the main go to persons to determine a decent content strategy to make the content optimally useful and consumable by various types of end-users. To summarise, an information architect is the single point of contact for all the content blueprints, which will be delivered by the technical writers.

For this very reason, Information architecture is emerging as a distinct principle from technical writing, as it encompasses a company’s overall online content strategy from being just a user documentation. Information architects are required to define the content strategy, which is scalable and provides better accessibility and usability of the product content.

**What’s the key take from this presentation?**

This presentation will provide aspiring Information Architects a thorough overview and understanding of information architecture basics for technical writers. The goal of this presentation is to show how information architecture basics can be applied to our legacy technical documentation and make it more...
usable with better accessibility, findability and readability of the existing content. In this presentation, audience will learn about few real-time content issues that are fixed by applying IA principles.

During the presentation, audience will learn:

What information architecture is and how it impacts technical documentation.

- Architecture Basics – analysing, restructuring, reusing and presenting content which is easy to use and find.
- Information Architecture theories – classification, categorisation, metadata & labelling
- Information Architecture based content structuring - categorizing and structuring your content logically.
- Labelling patterns - Re-present content with new page layouts
- Navigation Systems - Re-arrange menu and sitemap for better accessibility
- Search options - Re-present new search options for better findability

At the end of the presentation, audience will understand:

Now that the audience have learnt the Information Architecture Basics, they will understand how working as an Information Architect of a larger product documentation team, they can share the four distinct factors to control their content management systems:

- Signposting – educate end users with product main menus and other sub-menus titles.
- Taxonomy and Categorisation – define a consistent nomenclature and naming conventions for different product documentation sections and articles/topics.
- Interlinking – create hyperlinks to allow users to jump to related sections.
- Navigation – prepare the sitemap and a page view of content layout, structure sections and articles/topics.

Also, audience will learn the following nuances of Information Architecture for technical writing:

How to design knowledge base, where users can find KB articles that they are looking for easily.

- What kind of structure or template is best for your content type (such as online help or PDF documentation).
- How to reuse content in articles/topics, which adheres to information architecture pattern defined for your organization.
- How to categorize different products with associated sections and sub-sections.
- How IA principles, such as organizing (labelling), structuring information (classification) and presenting (categorisation) your content affect your site’s success.
- How to do perform information analysis and create a perfect Information Architecture structure

The session will be an interactive one with discussion, questions and real-time examples on IA basics and principles.
IXIASOFT CCMS – Streamline technical documentation process

Sujoy Dutta, Nitin Garg

Abstract: IXIASOFT CCMS is a powerful and feature-rich system that has streamlined technical documentation process. As an enterprise-class DITA CCMS based on the DITA standard, the solution can be tailored to meet diversified documentation needs. The CCMS provides a democratic, collaborative work environment between cross-functional teams. In one word, this is a one stop solution for everyone involved in Documentation Development Life Cycle.

Why we chose IXIASOFT CCMS
- A win-win XML documentation solution for writers and customers.
- No Installation Hassles as this is a fully hosted service.
- IXIASOFT can be easily integrated with any 3rd party publishing platform, such as Zoomin.
- Highly scalable solution with access to hundreds of team members, including subject matter experts (SMEs), project managers, and system administrators without knowing DITA.
- Strong library concept to store and share reusable content between different product versions.
- Provides enhanced collaborative review process with simplified web-based interface for product owners and subject matter experts.
- Simplified Taxonomy concept to effectively manage, mine, and serve up content with the publishing platform.
- The documentation team can support different release schedules and parallel content development.
- Easy way to report issues through online ticket-reporting system.

Onboarding to new CCMS
- On-premise training and walkthrough of the know-how of the IXASOFT CCMS.
- Technical Analysis Meeting (TAM) was scheduled on regular basis between IXIASOFT and the Information Architecture team to understand the documentation structure.
- It had low learning curve, where writer picked up the new technology quickly.
- During migration of documents to IXIASOFT CCMS, documentation release cycle and publication process were as it is.

Nitin Garg has around 12 years of experience in the field of Technical writing and Information architecture. Currently he is associated with Mastercard Financial services company at Vadodara office. He has worked in various domains including Data recovery, Payments, Telecomm, Insurance, Healthcare to produce user and web-based documentation. He is a first-time speaker at STC India chapter. His passion mainly includes innovation, simplify content authoring process (for example automating API documentation), contributing as Information Architect and mentoring peers.
• The same Oxygen authoring tool is available on new CCMS that writers were using. So there was no hold time after migration of files.

Need of a new CCMS
There was a need to improve technical communication processes and upgrade customer experience. The content authoring team was looking for a change as it became a challenge to manage content for internal and external customers. The change in terms of solution which provides a simple interface for authoring, reusing and publishing content in the DITA CMS.

Pain Points in Current Process
There were suppressing issues which needed to be addressed immediately in terms of:

- Manage content reuse strategy
- Simplified content review process for SMEs and engineers-in the documentation process
- Manage increased localization cost
- Manage and document parallel software versions
- Seamlessly integrate new teams due to acquisitions
- Produce consistent documentation across a large variety of output formats
- How to create effective taxonomy to search required content on publishing platforms

Why we Adopted IXIASOFT
IXIASOFT component content management system (CCMS) is based on the DITA standard; an open XML-based standard for publishing and authoring. It makes managing each step of the documentation process simple.

No need for author to work on different tools and platforms for various documentation activities, such as creating, archiving, and publishing content. Technical documentation plays a pivotal role in the customer journey. This makes it critical for businesses to craft a strong content strategy that goes beyond the exclusive focus on efficiency goals (that is content reuse, Omni channel publishing and minimalism).

Therefore, IXIASOFT has proven itself a pioneer in content management software, providing innovative solutions to manage, share and deliver brilliant content.

IXIASOFT CCMS is a documentation solution that combines the mechanics of an extensible environment, a powerful Component Content Management System (CCMS), and the elegant modularity of DITA. The union of DITA architecture with a CCMS provides tremendous control and flexibility for managing structured units of information. This evolution for technical documentation lets users:

- Content management through a well-defined workflow
- Manage content for required markets and audiences
- Simplified the localization process
- Work in a collaborative environment across different geographic region

Sujoy Dutta has over 15 years of experience in documentation. He holds masters degree in computer science and worked in different verticals in IT industry, such as e-learning, network, telecom, and payment systems. As a technical writer, his work consists of varying deliverables, such as API guides, user guides, and video tutorials. Currently works in Mastercard (Pune) as Senior Analyst in Content Strategy and Development. Sujoy has advanced DITA knowledge and experience using the IXIASOFT CCMS.
- Improve consistency in content structures
- Re-use content in multiple deliverables.
- Improves author’s efficiency with well-defined reuse strategy.

Content Migration Experience

It can be a challenging task where the need is to migrate and adopt new content authoring tool. This also becomes a worrying factor when the teams are based out at different geographic locations.

Initially, it was thought how the migration and content organization to the newer CCMS tool would happen since there was a huge legacy and other similar content, it was looking a tedious task. With adaptation of IXIASOFT, the migration process became a bit easy with mechanism for segregating content into logical collections named as Dynamic Release Management (DRM) Containers.

Concept of Logical separation

- Related content is virtually grouped together in logical units named “Products”. Content can only reference content in the same product unit.
- Content in units named “Libraries” can be reused by any product. Libraries are functionally identical to Products but can also share content between other libraries.

Streamlined Document Management for Everyone

Author
A set of technical authors who are creating and maintaining the content.
- Built-in Oxygen XML Editor, simplifies the authoring, collaborating with other authors, and reviewing.
- Robust content workflow and search capabilities makes it easy to find and reuse content.
- Version management keeps track of revisions and track of changes.

Reviewer
The editors, proof-readers, and SMEs who verifies the content and provide their feedback.
• Author can ask an SME to review a particular topic. This is useful when SMEs are associated with a topic or content of a functional document.
• Multiple reviewers can review the same content at the same content, where annotations are displayed in line of a topic.

Information Architecture
A person who manages the CCMS system to fit with the business need.
• Creating templates for various documents to cater the need of the customers.
• Managing metadata, taxonomy, and labels.
• Managing Dynamic Release Management (DRM) to support the document version and releases.
• Access rights are role-based, which determines when an author can access a content. Authors are assigned to particular DRMs, where their project documents are available.

Conclusion
Though authors are located in different part of globe, all get connected with IXASOFT CCMS, which was missing earlier.
Adoption of new CCMS was seamless with easy-to-use software and Information Architect (IA) team, working round the clock for smooth migration of all content on IXASOFT CCMS.
Bringing a change in the documentation process is a great challenge for any organization. Minimum downtime and excellent technical support was the major advantage of CCMS. This results in faster documentation deliverables with happy customers.
Measuring Results Periodically on the Journey to Excellence

Thushara B

Abstract: In this era of software development, the intent of providing usable software with end user documentation is gaining high priority. In reference to our past experiences, the V-model strategy of delivering the user documentation resulted in inadaptability to the frequent requirement amendments. The customer was exposed to only the final project and not the intermediate modules. The unstructured nature of document workflows, inefficient processes, lack of standardization, limited monitoring led to the risk of sensitive information exposure. The processes involved were thus evaluated and determined to be risky, rigid and least flexible. This evaluation led to the transition to LEAN methodology of software development.

In Lean methodology of software development, the target is to produce usable software at the end of a takt (In Lean context, takt means cycle time.). This implies that the user documents should also be delivered, which accurately reflects the functions, features, and results of the applicable software. This methodology focuses on satisfying customers by giving them what they want, when and where they want it, thereby eliminating any form of wasted time. This streamlined document delivery improved the customer acceptance, resulted in customer tributes, and increased the business value. This is simply the culture and thinking of lean.

This paper presents the process changes that we carried out in making the document workflows in the LEAN methodology standardized, streamlined, and effective. This change in process has helped us to boost performance, track and align better with the delivery schedules of source and target language documents. Additionally, interactive videos and web tutorials were innovated as a measure to eliminate waste and add value to the customer.

“Excellence is not a destination; it is a continuous journey that never ends.

Ain’t no stopping us now as we work on making progress and improving a little bit every day.”
Introduction: User documentation refers to the documentation which is designed to assist end users to use the product or service. This documentation is a part of the overall product delivered to the customer. Successful user documentation is the result of identification of proper audience, thoughtful software and document design, and good writing style, in addition to the structure, content, and format requirements addressed by the industry standards. The goal of documentation is that the product is easily usable by its intended audience for its intended purpose. The document delivery goes in parallel with the software delivery and the project cannot be released unless the planned documentation is available. LEAN document processes start with safeguarding confidential information and protecting vital information. Automated alerts for unauthorized access, usage tracking, and authorization of document access were among the few to be implemented for protecting sensitive information.

Principles of LEAN:
LEAN is a management philosophy that fosters the culture of continuous improvement, to deliver value from the customer’s perspective, and waste elimination. LEAN can radically change the way you do business. LEAN management is based on the following principles:

- **PULL**: Rather than producing as much as possible, customer demands pull goods or services through the manufacturing processes. With respect to user documentation, if a feature is not used by the customer, do not bother documenting it. This minimizes over production, inventory, and working capital.
- **One-piece Flow**: Focus on a single document requirement at a time to minimize the workload, process interruptions, and waiting time, while increasing quality and flexibility.
- **Zero Defects**: LEAN does not pass on defects. Documentation mistakes from the previous steps are fixed before going on.
- **Continuous improvement process**: Keep a check on document quality, lead time, and costs, to seek perfection through continuous improvement.
- **TAKT**: The pace at which you manufacture a product to meet customer demands. TAKT allows us to balance work content, achieve a continuous flow in documenting requirements, and respond flexibly to the changes in the market.

Core Elements of LEAN:
LEAN software development methodology is based on 9 core elements, namely, Ranked backlog, TAKT, TAKT team, Usable software each TAKT, QCD responsibility end to end, Synchronized process, Scope variable, Employee empowerment, and Continuous improvement.

In LEAN, the requirements (including UDOC updates) are ranked for the highest achievable customer value in the product backlog. The requirements that can be implemented are extracted to the release backlog. These prioritized requirements are drilled down to user stories and assigned to several TAKT teams associated with the project. Each TAKT team is a combination of competencies from Architect, Developer, Tester, Usability, Configuration Manager (CM), and User Documentation (UDOC) members. The UDOC defines the scope of these requirements, categorizes as formal, functional updates, and technical enhancements (that do not impact UDOC), and estimates the effort for completing each task. The TAKT team implements the technical and UDOC content. With respect to UDOC, the content is reviewed by the UDOC counterparts, technical team, and the Product Owner (PO). The reviewed content is integrated and tested, and the results are evaluated, producing integrated and system tested software including documentation at the end of each TAKT (cycle time). Daily stand up meetings are held to ensure transparency and faster status exchange. The Quality, Cost, and Delivery (QCD) for the project is the responsibility for all the TAKT teams. The scope can be variable but there is no compromise on project
and document quality. The TAKT team members demonstrate values such as trust and responsibility. Everyone has a role within the team to plan and commit what can be realized within the next TAKT.

Apart from TAKT team, there are additional roles defined that cater to the efficient management of the project, namely, PLM, PO, LEAN coach, and the Experts team. The PLM describes the functional and nonfunctional features as detailed requirements. The PO maintains his part of technical release backlog and explains the requirements to the takt teams. The LEAN coach mentors and enables the TAKT team to organize themselves in lean methods & tools. The experts from Usability, Test, Architecture, Documentation, and CM forms the expert team responsible for handling escalations and issues from their respective TAKT teams.

**LEAN Paybacks:**
LEAN in a nutshell, can maximize value to the customer and minimize wastes. The direct benefits include reduced operating costs and lead times. With LEAN, the efficiency, effectiveness, and quality of processes are increased, thereby eliminating the investment costs on additional equipment and resources.

One of the most important concepts in LEAN is the focus on continuous improvement. The only true indicator of a good strategy is good results. By following the LEAN strategy, the precision, quality, usability, and adaptability of the software and user documents soared high and resulted in improved customer acceptance, customer tributes, and increased business value.
Moving from PDF to Product Videos

Gopalkrishna Tharoor

Abstract: Move forward with changing times is the adage. Technical Documentation too has moved ahead from days of long winding documents. We upgraded to structured methodology, Content Management Systems, DITA, XML and just when we decided to utter Phew, the times changed and the technology leaped manifold. To keep abreast of the changing times, it is interesting to note that user or reader attention span is reducing. It is in this context at Scientific Games, the TechDoc team was entrusted the mantle of exploring the creative side of us. Product introduction videos all under four minutes were conceptualized, designed, scripted and developed by the technical writers working on the respective products.

At Global Gaming Expo 2019, there ain’t no stopping us because we garnered 45% acceptance with our product videos.

We make it happen!

The most creative ideas can be generated when you tap into the creative instincts of people. The TechDoc team at Scientific Games found themselves at the challenging end when a new line of thought was presented. We had to use our domain knowledge on our respective products and come up with an introductory video outlining the concept and being equally creative.

Technical writers with strong experience in domain and the writing skills to create and manage the content – smooth experience that users are looking for today, and this assignment was meant to raise the bar that we have a creative instinct within us.

These tasks call for the following as in the DDLC. We plan to arrive at the best tool devoid of licensing issues, so that we could co-create effectively and deliver on time.

- The video must grab user attention.
- Duration must not exceed 4 minutes.
- Create the outline with graphics using PowerPoint.
- Back up the video with a killer script.
- Ensure the voice over is spot on so that listeners attention does not wane.
- Videos need a standard opening and close. It must showcase as coming from Techcom team.
- Gain all round acceptance.
Product videos are essentially attention seekers. They must grab the eye-balls of the user within 3 to 4 minutes. That is the first battle won. The focus must be on the visual presentation and it must be done in a professional manner. The product introduction videos must help to supplement the Technical documents and statistics reveal that forty percent of the users and seventy two percent of the millennials prefer video to text.

Once you have held the attention of the audience, the script must be the hook. The opening line must take the user hook line and sinker that they get sucked in and you have their attention. The user must be able to relate to the content that the video leaves an everlasting impression on their minds. Every video presents a problem, introduces the solution and states how it works. The focus of our team was to introduce the product that helps grab attention instead of a detailed introduction.

The next steps for us to move from product introduction to other kinds of videos that suit the user needs. We will have to think of video templates that are consistent and we may have to reuse and therefore cheaper localization, maintenance, and publishing. Customer satisfaction surveys and L1/L3 support desk call logs help to understand different kinds of customer priorities. The changing demands of the clients have to be constantly monitored and we have to deliver.

The product videos were showcased at G2E 2019. We won the user's hearts and the marketing team more than welcomed us to use their design library to make the videos competitive.

Each writer entrusted with the task showcased brilliant creative side of themselves.

The videos developed were spread across different product categories including one new product. Captivate our tool to the rescue, script and reviews, PowerPoint and good choice or images, Script and timing in place ensured that: *There’s no stopping us now. We make it happen.*
Not entirely successful with UX? It could be the Words!

Shivi Sivasubramanian

Abstract: “Wow. That’s an awesome-looking design! Err .. Wait, what does that small little button there do? The label is confusing. Should it even try clicking it? What if I lose my work?”. I’m sure you can relate to that and are being reminded of numerous such experiences you have encountered in the past. When UI copy is not given the importance it truly deserves, it shows in the outcome! The process of writing for user interfaces has long existed; up until a few years or so ago, however, software development teams invariably employed non-expert writers to do the job, and even worse, the task got scheduled for much later in the release cycle. An ill-crafted piece of text on a well-designed UI entails the risk of adversely influencing the overall UX (user experience).

Good news is there’s been a shift in the mindset - software companies have come to realize that crafting words and establishing standards for them is as critical as designing interactions and visual layouts. “Designing content” for user interfaces is a challenging, but equally interesting practice of creating texts users see when they interact with a software application or website – for example, tooltips, CTAs, instructional texts, error messages, and so on (aka microcopy) – popularly known as “UX Writing”.

The principles of UX Writing help improve the situation in many ways. What should you do?

- Include UX writing standards in the organization’s content strategy.
- Create a style guide that clearly lays out the voice and tone of microcopy and implement standards for the UI content.
- Integrate UX-oriented writers into the design/development team.
In this paper/presentation, I introduce the concept and process of UX writing, discuss best practices to follow in this area of work with real-world examples, highlight the benefits it can offer, and lastly, share my own experience of spearheading the effort of implementing the process in my group.

**WHAT’S THE CONTEXT?** The process of writing for user interfaces has existed for many decades now, but was never given the importance it truly deserves. Last few years have seen a shift in the mindset - software companies have come to realize the value of texts that go into product user interfaces. Words can heavily influence UX (user experience) as much as the navigation system or information architecture of a software product does. They are quite agreeably a critical element that can make your designs gracefully succeed or miserably fail! The product you are building ought to tell a story with carefully chosen words.

**WHAT’S SPECIFICALLY THE ISSUE?**
Software development teams tend to focus on every other aspect of the design process (user journey, navigation, flow, research, visual, and so on), but fail to acknowledge that it is equally important to make the textual communication between the product and users clear, consistent, and human-friendly enough. Quite often, designers or developers on the team are held responsible for creating the texts and quite unfortunately, the activity happens towards the end of the release cycle, after most of the development work is complete. Consequently, UI strings are long and complex (loaded with technical jargons), and hence not so comprehensible, easy-to-consume, or consistent as they ought to be. Even on an entirely pleasing UI, badly crafted texts can be disastrous. This obviously entails the risk of negatively influencing UX and companies end up losing the trust of their customers.

**WHAT’S THE SOLUTION?**
“UX writing” is what it is.

What is UX writing?
UX Writing is the practice of crafting content for user interfaces (popularly known as “microcopy”) that not only helps users get oriented with the products they use, but also make sure that they stick around. UX Writing must be integrated as a mandatory element into an organization’s design process.

What do UX writers create?
UX writers must get involved early in the design cycle. They collaborate with designers and cross-functional teams to craft texts including, but not limited to the following:

- Navigational instructions
- Call to actions
- Placeholder texts
- Titles for UI elements, such pages/dialogs/wizards
- Instructional texts
- Button labels
- Error messages
- Tool tips

Just like how designers work with colors, shapes, and icons, writers work with words and sentence structures to create content that perfectly resonates with the intended audience.
What makes effective microcopy?
The content you develop for user interfaces must be:

- clear (easy to understand, unambiguous)
- concise (just enough, nothing more nothing less)
- consistent (same style, voice and tone, and terminology)
- useful (necessary help with user interactions)

Great content is a key differentiator that sets a successful product apart from a product that people hardly care about.

How should you approach the process?
Voice and tone are a vital element of digital products. To ensure that UI copy is crafted in line with your brand’s voice and tone principles and the quality is never compromised, UX writing should be made an integral part of the design process. And for the communication to work effectively, UX writers should become more and more integrated with the design teams.

In our experience, the process works brilliantly when writers, designers, and developers work together on the concept and content from the start. Everybody being on the same page means less effort and reduced frustration at every stage of the development cycle.

- Include UX writing in the organization’s content strategy.
- Create a style guide that lays out the voice and tone of UI texts and implement standards for the terminology used in the communication. Choice of every word and sentence should be based on the style guide; no personal preferences of the writers’ should matter.
- Integrate writers into the design team and hold them responsible for all textual content – let them create the exact phrasing, say for example, of a certain call-to-action or an error message. They should work in collaboration with the design team to determine the voice, style, and tone that resonates with the target audience.
- Start off with content work (creating and reviewing textual content) early in the design cycle, for example, during the wireframing phase.

Should you test microcopy?
Yes, of course! As you’d do with any new piece of work in the development process, test the microcopy with designers, developers, testers offering managers, and more importantly, your sponsor users. Apply A/B Testing methodology or something similar and determine whether the content meets your requirements.

What does it take to be a UX Writer “on demand”?
Companies primarily look for the following skills in UX writers:

- Ability to interpret product requirements and strategy, and technical limitations.
- In-depth understanding of the design principles and user-centered design processes, and how microcopy fits into the overall UX.
- Familiarly with localization process and writing for global audiences
- Communication, storytelling, and writing skills
What are the benefits?
UX writing is probably the most efficient way of fixing any gaps in UX – it helps you establish a strong and consistent vocabulary of communication, promotes brand’s voice, makes your customers happy, and builds trust in your products and brand. It alleviates their apprehensions and helps them successfully complete their journeys across the product. The result? Enhanced UX and super-happy users!

Conclusion
Product designs must be built in such a way that visuals support words seen on a product’s user interface and never the other way around. Quoting Jeffrey Zeldman, “Content precedes design. Design in the absence of content is not design, it’s decoration”.

Project and Quality Metrics
Vishal Prasad, Shubhada Jahagirdar

Abstract: It’s been decades now that the market has become very volatile and the customers have become very demanding. To satisfy your customers and retain their loyalty, quality is very critical. Quality products not only help win customers but sustain and contribute towards long-term revenue and profitability, and make your presence felt in the market.

To achieve a quality product, some metrics must be built to translate the needs of the customer into an acceptable measure of performance.

At Nokia, our Project Managers assess the progress, efficiency, productivity, and performance of the projects by evaluating these metrics. It helps to control the cost, improve the quality (left-shift, as we call it in Nokia), and identify latest trends across the industries.

We use different metrics to track the Customer Documentation (CuDo) business activities and then measure the success or failure of the two Key Performance Indicators (KPIs) – Project KPIs and Quality KPIs.

The project KPIs measure the operational efficiency and effectiveness for achieving key business objectives by CuDo. It determines the success of a project, and help the Project managers evaluate a project’s status, foresee any risks, and assess team productivity and timeliness.

The quality KPIs measure the quality of the deliverables (during the process of content creation) for achieving key business objectives and customer satisfaction. It assesses the conformance of a project by validating the acceptability of an attribute or characteristic for the quality of a particular result.

These main KPIs are further divided into multiple single units for easy coverage and tracking, and hence, can be evaluated easily.

My presentation would focus on some good practices from Nokia as follows:

- What is a KPI and how it evolved.
- Why are KPIs required?
What is a KPI and how it evolved.
As per the Oxford dictionary, a KPI (Key Performance Indicator) is defined as “a quantifiable measure used to evaluate the success of an organization, employee, etc. in meeting objectives for performance.” Hence, in simple words, KPIs are very critical metrics that measure the success or failure of any business objective. It is measured against a specific target or benchmark, adding context to each activity being measured.

At Nokia, the KPIs have evolved year after year from just tracking the customer faults and closure time to a very detailed and well-defined KPIs now.

Why are KPIs required?
KPIs are for the Project Managers to assess the progress, efficiency, productivity, and performance of the product, process or the project by evaluating these metrics. It helps to control the cost, improve the quality (left-shift, as we call it in Nokia), and identify latest trends across the industries.

How are KPIs defined?
We focus on capturing the indicators for operational efficiency and effectiveness, and the quality of deliverables for achieving business objectives. To do so, we have defined two categories of KPIs - Project KPIs and Quality KPIs.

The project KPIs measure the operational efficiency and effectiveness for achieving key business objectives by CuDo. It determines the success of a project, and help the Project managers evaluate a project’s status, foresee any risks, and assess team productivity and timeliness.

The quality KPIs measure the quality of the deliverables (during the process of content creation) for achieving key business objectives and customer satisfaction. It assesses the conformance of a project by validating the acceptability of an attribute or characteristic for the quality of a particular result.

How are KPIs measured?
Below are the ways we measure the KPIs (as a whole Business Unit, and not just product wise):

My presentation would basically focus on the good practices from Nokia and would leave the audience with a message to gauge their present quality metrics and take with them any effective method of project or quality KPI measurements which they find suitable for their project.
Project KPI:
- No. of delays in the release because of Documentation
- Review coverage:
  - Peer review coverage
  - Technical review coverage

Quality KPI:
- Technical review quality
- Testing KPI:
  - Usability
  - Procedure first pass-rate
- Product quality
  - New customer defect reports:
    - No. of defects
    - Average fault correction time
    - RCA completion
  - Customer faults:
    - No. of faults
    - Improvement action completion
  - Internal faults:
    - No. of faults

In my presentation, I will be providing details for each one of the above parameters along with a detailed way of calculating the values and the targets which Nokia uses.

How are KPIs reported and analysed?
KPIs are reported on monthly basis. The project KPIs are reported by the Project Manager and the quality KPIs are reported by the Fault co-ordinator. It is the responsibility of the Fault co-ordinator to collect the specific data from the writers and report the quality KPIs.

The reported KPIs are then viewed by the Business Unit Manager and Quality Manager.

We also have a dashboard (created in PowerBI) where the KPIs are automatically picked from the database for all the projects and are displayed in graphical view to everyone to see – we believe in transparency.

During my presentation, I will show the live Nokia dashboard to the audience.

Who are the target audience for the KPIs?
Everyone related to the project/product should be aware of all the KPIs for their projects. It is mostly important for the Documentation Project Managers, Fault co-ordinators, and the Writers to be aware of these KPIs as the KPIs are viewed and judged by higher managements and it helps them see how the product is performing on a broader way.

Takeaways for a Documentation Project Manager Vs a Technical Writer
Project Managers see the status of the projects, and also foresee any risks that are involved. It is equally important for the writers to be aware of the KPIs as well. They should be aware of their targets and should continuously improve in their daily work to make sure that they are directed towards the business objective at the end.
Redefining the fundamentals of Quality Assurance

Kim Stanley, Siva Venkata

Abstract: In a corporate organization, a group of individuals are often brought together as a team to work on a common vision. While working towards that vision, an exchange of ideas and feedback must take place through conversation, email, and other various communication methods. During this process, there is a strong possibility that key details may be lost. This loss results in confusion which can stop the group from achieving their goal. Like many other organizations, Epicor witnessed this progress blockage first hand. To keep moving forward we introduced a program to streamline the quality assurance process and ultimately provide the optimal user experience. We approached this challenge using Design Thinking principles and created a simple but genius framework.

Our presentation demonstrates practical guidelines for creating a framework to streamline QA for content professionals. This process will allow them to create exceptional quality assurance programs within any industry. The purpose of this framework is to understand the user and provide a great user experience for them.

This framework consists of 3 phases- 1) Always Ask, 2) Behave Bizarrely, and 3) Create Checklists. We also developed internal procedures to closely monitor production metrics. The implementation of this QA process at Epicor yielded exceptional results. We saw increased output along with a significant decrease in production time and improved consistency. We also noticed a decline in the average time required to create guided learning, documentation, and video content. This helped us provide our customers a familiar and easy to adopt user experience across all our cloud products. Now that this is routine for our team, there is no stopping us from being the industry leader in our markets.

An integral part of any user experience is consistent and accurate content. While we all like to think that our own work is sheer perfection, a keen outside eye is needed to ensure that is the case. Therefore, effective quality assurance processes are critical to successful technical communication.

This session will provide inspiration and practical guidelines for content professionals allowing them to create and implement an
instructions when we don't know what to do. Basically, we just want someone to give us the answers. The ability for us to YouTube exceptional quality assurance program within any industry. This process was developed by the WalkMe Center of Excellence within Epicor software. The group was formed in 2018 to develop internal procedures while closely monitoring production metrics.

Humans like to make things complicated. Yet, as humans, we yearn for easy to understand or Google those answers puts added pressure on every technical professional to make our solutions just as easy to find as our internet searches.

But when humans exchange ideas and feedback either via email or through a conversation, there is a large possibility that details may get lost in the so-called translation. Our intentions are not always apparent from our words and our words are not always interpreted correctly. By following a few guidelines, you can eliminate most of the confusion and inconsistency.

• A: Always Ask
  • Obviously, communication paths within your organisation need to be clearly defined for exceptional quality control. Nowhere is this more important than between the editor and the writer or the reviewer and the builder. When one party is unsure, the best way to find out the design intention is to just ask the creator. By having the freedom to state that they do not understand the material in its current format, the assurance analyst creates an open environment for further explanation and eliminates the possibility of misunderstanding.
    o • This is true for both written and verbal exchange. Written requests for clarification should be concise and contain specific examples, screen shots, videos, anything needed to make sure both parties understand the issue.
    o • It is also not just enough to attend scrum or sprint meetings; the QA team must be actively Listening. To do this they must be actively participating. We have all sat in on a conference call and multi tasked, scrolled through our phone, shopped on Amazon. As QA we cannot sit passively by and hope that the development of our product turns out right. We need to ask questions about why something was designed or written or built in such a way. We need to ask how they intended the end user to utilize this product and we need to make sure we understand who the intended target audience is the first place.
  • Ask the stakeholders.
There should be a clearly defined list of stakeholders and regular updates to that group to ensure that content meets corporate guidelines, follows security constraints and branding directives. Don’t wait to ask for forgiveness later. Make sure your stakeholders are exposed to processes and final production.

- Asking the builders or dev is the best way to get to the source.
  - The QA team should not be afraid to constructively criticize, make recommendations and even offer praise. By creating an atmosphere of professional respect, quality control will be equally yearned for.

- Ask your audience.
  - Offer them various methods for input and feedback. You are creating content for them, why not get their opinion on how you’re doing? Surveys, phone calls, email exchanges, conference attendance should all factor into how work is formed through the QA process and made ready for viewing.

- B: Behave Bizarrely
  - In order to truly review content and ensure quality you need to think like a customer, a client or whomever your target audience is. Reading or viewing content with your background and knowledge will not help make sure that the receiver understands it.

- Bizarre situations.
  - Even when a scenario seems unlikely, as a QA analyst you need to try it. As each iteration of content is reviewed and new ways are uncovered to break a process, those should be documented so that they are used going forward and so that the entire QA team can benefit from your experience.

- C: Create Checklists
  - As humans, we have a limited capacity for recall and memory. We write lists for just about everything we want to be sure to remember. QA is no different. These checklists will create consistency in how content is made, changed and reviewed.
  - Checklist for agile development.
    - If you are working in a scrum format create a checklist to make sure each sprint produces consistent, solid material. Use your method of project communication to create a set list of tasks that occur without fail for each sprint period and provide that list to your stakeholders.
  - Checklists for standards.
    - A quality assurance employee should never have to guess what the correct font, color, format, style, length, size, number of pixels, etcetera is. Create a document as these standards are developed that is accessible to the team and add a checklist so that each time content is reviewed, the items listed there are met. It will help reduce edit time by taking the human element out of what should be checked. Your standards document will be a living one as changes and additions will occur with technology changes.

By spelling out our quality assurance process at Epicor we have increased output, decreased production time and improved consistency. The average time required to create guided learning, documentation and
video content continues to decline. Additionally, our customers are now met with a familiar, easy to follow user experience within all our cloud products.
Redefining the Role of a Technical Writer in the Age of Digital Transformation

Asha Mascarenhas

Abstract: In this session, titled Redefining the Role of a Technical Writer in the Age of Digital Transformation, we will share our experience and learnings on how we “transformed the existing traditional documentation process and brought in sustainable change”. Scattered and static information has made way to a more interactive experience, where customized and personalized content is made available to the user. We will trace our role from that of a Technical Writer to Content Editor to Information Architect and chart our path forward as we metamorphose into Conversational Experience Specialists. The audience can join us, as we continue our journey powered by chat and voice bots, and AI in keeping with the future expectations.

We will also bring to the fore the result of our research and analysis, the efficacy of our approach and methodology, and the framework and tools that made the documentation process simple and self-driven. We will share our recommendations on technical and information strategy that can ultimately impact and positively influence any organization’s output, quality, and effectiveness.

Our solutions comprise frameworks that:

- Are a one stop shop where we effectively collect, collate, organize, and store multi-stakeholder, multi-user and multi-purpose information
- Are intuitive and easy to update, thus making collaborative authoring and reviewing a possibility
- Contain information that is well structured for easy navigation
- Do not restrict users to only text and image content, but opens up a plethora of communication options like embedded videos, inbuilt help, tooltips, and more
- Allow the user to effortlessly find information through an interactive UI
- Cater to the visually challenged as well, through an inbuilt text reader
- Engage the user through its visual appeal
- Keep content fresh, constantly updated, and therefore relevant in an agile manner

Asha started her career as a content writer, then moved to technical writing, editing, and then to managing the Technical Communication group of TCS Mumbai. After more than a decade in core technical communication, she explored the field of user experience and went on to create the User Assistance CoE in TCS. Here she has ideated and implemented several value-added services that provide an enhanced user experience.
We are riding the fast-paced wave of digital transformation, jet skiing at a breakneck speed through revolutionary technical development, and thus soaking in the exhilarating golden age of technical communication. It is an age where compelling experiences are propelled by digital transformation, thereby creating new waves of opportunities in the field. Content therefore has moved from being a peripheral add-on, to becoming a central driver. Information strategy thus becomes an integral factor towards enhanced customer experience.

Scattered information needs to be pooled and then classified into streams that can lead into an ocean of knowledge. This is where information strategy needs to evolve, as documentation is now less reliant on traditional standard methods. Static content has made way to a more interactive experience, where customized and personalized content is made available to the user easily. Chatbots, User Communities, Product Forums, Troubleshooters, Contextual Help, Consolidated Knowledge Base and more are now taking on the job of user documents as well as customer or product support teams.

For more than four decades, the Technical Communication group in TCS has been a pioneer in the field of technical documentation, and in creating documentation assets and standards. TCS’ innovations in the field of technical communication combine indigenous methods and software that create a controlled, enabled, and automated authoring environment.

Going with the flow of the tide, we progressed towards User Assistance, to provide a robust and scalable way of handling the documentation demands of more than 360 Products, Platforms, and Solutions. This required bringing in a sustainable change to the current documentation process, and identifying technology, that is flexible, adaptable, and scalable. We created frameworks and tools that make the documentation process simple and self-driven, with minimal dependency on technical writers, and ensure a quick turnaround to serve such a humongous line of products.

A quick look at the advantage of our services over traditional documentation processes.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Traditional Documentation</th>
<th>Advantage of our Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Management</td>
<td>Multiple documents are maintained for a single product – which is difficult to manage</td>
<td>A single portal holds entire information about the product – that is useful for all stakeholders</td>
</tr>
<tr>
<td>Information Accessibility</td>
<td>Connect or accessibility of information between documents is low</td>
<td>A comprehensive information map, and a robust search functionality, with autocomplete feature optimizes search</td>
</tr>
<tr>
<td>Content Authoring</td>
<td>Only a single person can create or edit a document at a time</td>
<td>Supports collaborative authoring as well as simultaneous reviewing</td>
</tr>
<tr>
<td>Content Presentation</td>
<td>Working of the product is explained using only text and images or screenshots</td>
<td>Seamlessly builds in videos, downloadable attachments, links, cross references, and more in a structured, easy to manoeuvre format</td>
</tr>
<tr>
<td>Content Reuse</td>
<td>Content reuse is done through Save as, and copy-paste</td>
<td>Templates are used for reuse of structures and repeatable content. So you can ‘create once, use multiple times’</td>
</tr>
</tbody>
</table>
Parameters | Traditional Documentation | Advantage of our Service
--- | --- | ---
Interactive | Linear flow with very less user interaction | Users can post comments, provide feedback, bookmark a page, get a count of footfall on a page, quicklinks to specific pages or sections
Agility | Every release demands a fresh document | Content is fresh, relevant, and constantly updated, in an agile manner

Today, our User Assistance group has successfully implemented this robust documentation framework in more than 50+ products in TCS, and helped them optimize time and effort. Earlier, a quarter-long process of documentation included multiple iterations between developers and technical writers to understand the application or product and draft the content. However, this has now reduced to 1-2 weeks with lesser iterations as Technical Writers have enabled the developers to draft the content according to set standards. Our role now is to create frameworks, set standards, enable technical developers, review their content, and assess the final output.

**Key Takeaways**

- Evolution of the role of technical writers in the age of digital transformation
- Movement of content from periphery to center stage
- Increased importance of Information Strategy
REST API Documentation

Ramya Umesh

Abstract: In the ever changing and evolving software world, The RESTful APIs provide an excellent framework for Web Services. The beauty of the REST API lies in the fact that the communicating clients can be platform and programming language agnostic.

From the days of manual validation of individual REST API calls to a full-fledged DevOps alignment mode, REST API documentation in Nokia has evolved tremendously on many fronts.

We provide accurate documents by executing the REST calls using tooling platforms for validating the Responses, adding appropriate descriptions, grouping the calls, and real-time publishing. The descriptions and examples provide the necessary information pertaining to individual call usage.

We support on-product documentation of REST APIs. This involves real-time integration with the developer GIT and building the HTML documentation which is integrated into the product periodically.

We support DevOps by continuously integrating Use-case scenarios on a daily basis. The necessary REST calls needed to support a use-case are identified, grouped together and validated real-time. These are accessible to the end-users on the DevOps portal.

These new methodologies have helped us achieve a quick turn-around time and are well appreciated by the stake holders in customer demos.

To summarize, the API documentation has seen a drastic evolution and we are deeply dedicated, exploring it further.

Digital disruption is occurring in all industries changing how we engage, interact, and support both customers and partners. We should always be ready, as the industry leaders are transforming their operating environment to be ready for an agile, fast-paced future.

Ramya has 11+ years of experience in the IT industry. She started her career as a System Verification engineer for access network and has contributed in various roles in Telecommunication fields like BTS testing, Intelligent networks, Unified charging and billing solutions, Big data analysis and so on in reputed companies like Sasken, Siemens and Nokia Networks. She is a part of customer documentation team in Nokia Networks from 3 years and has worked on feature documentation, Installation and upgrade manuals, rich media creation, and REST API documentation. Her current work involves documenting the REST APIs for the various scenarios, working closely with Product Managers and Developers. She is very passionate about mentoring and has guided budding engineers and writers in her tenure. This is her first experience as a speaker and is looking forward to contributing in many forums. She has won many accolades for her deep analysis, customer focus and technical expertise.

Digital disruption is occurring in all industries changing how we engage, interact, and support both customers and partners. We should always be ready, as the industry leaders are transforming their operating environment to be ready for an agile, fast-paced future.
REST API is the sought-after industry standard and is enhancing software experience in innumerable ways. REST is a software architectural model that defines a set of constraints for the Web services to achieve interoperability between its clients. The beauty of the REST API lies in the fact that the communicating clients can be platform and programming language agnostic.

From the days of manual validation of individual REST API calls to a full-fledged DevOps alignment mode, REST API documentation in Nokia has evolved tremendously.

In the initial days of REST API documentation, all the REST calls were manually checked for the Descriptions, Parameters, Data Type adherence, Request and Response examples, and packaged into the product documentation.

But, with the fast-paced transformation happening in the industry, having a large turnaround time is a huge set-back. Being in a document team for a product which supports thousands of REST calls, we have planned and approached the API documentation evolution very systematically. We chose to improve our focus on three fronts to meet customer satisfaction and industry standards.

We started using open source REST API tooling platforms like Swagger to execute the REST calls, validate the Responses, add accurate descriptions, group the calls, and publish the API documentation real-time. We have explored the feasibility to dynamically set-up the test environment to execute the REST calls. We are now able to share the collection of REST calls to be re-used in any cloud set-up/end-user establishments. The descriptions and examples in the API documentation provide the necessary information pertaining to REST call usage.

Secondly, we support on-product documentation of REST APIs. This involves real-time integration of publishing environment with the developer Git to build the HTML documentation. As and when there is a new REST call or an update, with a single command, we can source the latest changes and generate HTML documentation for the REST calls. The document so generated, always contains the latest modifications from the developer environment and is housed onto the product periodically. Also, we use internal tools to generate PDF documentation for print and use purposes. This eliminates the endless wait for the availability of latest documentation.

Finally, we would be left far behind if we did not scale up to support DevOps by moving towards Continuous Development and Continuous Integration. We maintain our product page with the latest updates and release details in DevOps portals. We have enriched the API documentation with the customer use-case scenarios. The necessary REST calls needed to support a use-case are identified, grouped together and validated. The procedure for a use-case with its applicable documentation and REST call examples are updated in the DevOps portal real-time and made available to the end-users.

These developments in the REST API documentation meant a big leap from the standard PDF documentation procedure. Naturally, like any invention, this was not readily accepted and was met with mixed opinions. But our constant perseverance paid off. We were able to demonstrate the value add the new API documentation methodologies brought to the product through many customer demos. It is now welcome with open arms and has also earned us many accolades from both the internal and external stake holders. We are now able to cater to new customer scenarios with a quick turn-around time. We have kindled close working relationship with R&D teams and are recognized as one of the key contributors to the product development.
The API documentation is evolving significantly and we, at Nokia are leaving no stone unturned to be at the pinnacle. We are proud to say that we have achieved a lot but are also prepared for new challenges and always strive to achieve Excellence.
Synergize to make a difference

Uthra Chandrasekaran

Abstract: Do you often get ad hoc doc requests and have trouble in streamlining them?

- Do you find it difficult to make the subject matter experts (SMEs) or the engineering team accountable for providing inputs and reviewing the documents?
- Do you have customer escalations due to non-availability of relevant information in the documents?
- Do you face challenges in collaborating with cross-functional teams?

These are some of the most common challenges that we, as technical communicators, face in our projects. This presentation will help you unfold these problems and will help you establish an end-to-end documentation process that is in tighter alignment with the engineering process. This presentation will also help you to synergize with cross-functional teams to add value to your deliverables.

The solutions in this presentation will suit any organization, be it services-based or product-based, and they can be implemented across domains.

JIRA and Confluence are the tools that we use in our organization to establish the documentation process and publish content to the end-users.

Overview:

- Do you often get ad hoc doc requests and have trouble in streamlining them?
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JIRA and Confluence are the tools that we use in our organization to establish the documentation process and publish content to the end-users.

**Main Aspects:**

Following are the main aspects that will be discussed in the presentation:

- Streamline the documentation requirement process – JIRA is used to collect requirements from the field (new feature, enhancements, defect fixes, etc). Documentation efforts are tracked using the same JIRA ticket rather than tracking them separately.
- Build plan into JIRA ticket to reduce the chaos of gathering and tracking information from multiple sources; diligently search where product change impacts doc set.
- Make the engineering teams accountable – Flagging documentation requirements and providing the required inputs in Jira to be made mandatory for the engineering teams to close a ticket.
- Establish a documentation workflow that is in line with the engineering workflow.
- Synergize to make a difference – Collaborate with cross-functional teams such as development, system test, and customer support to add value to the documentation so that the following goals can be achieved:
  - Solve problems: Help customers use our products to serve their business and solve their problems.
  - Improve time-to-value: Enable customer to get up to speed using or deploying the product quickly.
  - Increase footprint: Enable customers to take advantage of the full product offering.
  - Increase feature adoption: Provide the right guidance at the right time so the customer is never blocked.
  - Improve customer confidence: Provide accurate, reliable, easy to consume information.
- Co-author content along with cross-functional teams – Use Confluence for shared authoring and review process. Use Confluence plugins to create visual aids and publish content, thereby empower customers to troubleshoot issues.

The brief overview/skeleton of the Jira workflow is depicted in the flow chart below:
The presentation will bring out the intricacies in the flow chart. It will also cover how each stakeholder in the organization is involved in the documentation process and the success stories.

**Audience Takeaways:**

Feasible and proven solutions to the most common problems faced by technical communicators across the industry.
Think and Communicate Visually for Differently Abled

Nisha Uthaman

Abstract: From the simple cave paintings to the stained glass paintings in the churches, they all narrate a story in the form of visuals. In general, humans are visual beings. We all can think visually. To communicate anything visually, we have to think visually. Today any means of communication has to be visual to be compelling and engaging with the audience. Visual mediums can communicate information rapidly because our brain processes visuals faster than any other communication mediums. This has brought in significant opportunities to create an “inclusive” learning that accomplishes the special needs of the differently abled learners too.

Differently abled learners with cognitive conditions face challenges in terms of intelligence, memory, self-expression, information processing, connecting letters and sounds, spellings, recognizing or processing words. It just means they think differently because their brain processes information differently in an alternative way than the traditional way. At the same time, no two differently abled learners think alike, and there is no “one-size-fits-all approach.” Visual learning is not learning to think but thinking to learn. As visual communicators, we need to put ourselves into the learner’s zone, see through the lens of thinking and then process the thoughts into visual communication. Visual learners do remember and recollect the names of people, places, or things because they can identify and imagine them in their minds.

Today, Assistive Technology provides visual learning aids as per the needs and requirements of the learners. It allows them to access the relevant information from anywhere, at any time, interact, engage, and participate in the learning process. As visual communicators, we need to empathize with our end users, process their thoughts into visual communication, which keeps the learning and motivational level of the differently abled high.

From the simple cave paintings to the stained glass paintings in the churches, they all narrate a story in the form of visuals. We human are visual beings. Using visual medium, you can communicate information rapidly, because our brain processes visuals faster than any other communication mediums. To be a visual communicator, you have to think visually. It is an efficient way to deliver ideas.
Visuals are less ambiguous than text and have a far-reaching impact. This has brought in significant opportunities to create an “inclusive” learning that accomplishes the special needs of the differently abled learners too.

**Challenges Faced by Differently Abled**

Differently abled learners with cognitive conditions face challenges in terms of intelligence, memory, self-expression, information processing, connecting letters, spellings, sounds, and recognizing or processing words. It just means that they think differently because their brains process information in an alternative way than the traditional way. At the same time, no two differently abled learners think alike, and there is no "one-size-fits-all approach.

People with autism have difficulties with interpreting verbal and non-verbal language, tone of voice, and gestures. They might read and process language. However, people with dyslexia find it difficult to decode the written language.

For example, a student challenged with reading, may not understand an assignment at school that uses words, and the same student might comprehend if the assignment uses a picture instead. Too much of information received in a short span can overwhelm the students. Hence, they become bored, disengaged, and uninterested in the topic.

**Impact of Visual Learning**

Visual learning is not learning to think but thinking to learn. As visual communicators, we need empathize with our learners, put ourselves into the learner’s zone, see through the lens of thinking and then process the thoughts into visual communication. Visual learners do remember and recollect the name of people, places, or things because they can identify and imagine them in their minds. Technology has changed the way of learning. It has brought in tremendous possibilities to create an ‘inclusive’ learning that takes into consideration the special needs of the differently abled students.

Today, Assistive Technology provides visual learning aids as per the needs and requirements of the learners. This includes computer software, learning applications, communication devices, technologies such as virtual reality, and augmented reality, and so on.

**Learning Apps and Smart Phones**

The recent development in technology provides solutions to differently abled. Learning has become accessible to all with smart phones and learning apps. There are learning apps for different needs such as learning language and science, understanding behavior patterns, and any other different challenges that the students face. You can download these apps to your smart phones or tablets and access them from anywhere and at any time.

Certain learning apps that help autistic people to speak using the pictures displayed on the screen. The app uses picture symbols to help non-verbal users improve their language skills. There are also apps to improve the socialization skills of differently abled. It helps them to learn to remember faces, make eye contact, and identify facial expressions.

**Simulation Experience and Animated Movies**
Technologies such as virtual reality and augmented reality aided with smart devices, large-screen displays, projectors, create a stimulating and engaging environment that is conducive to keep the learning interest and motivation level high for differently abled.

For example, if you want to teach about marine life, use simulation technologies such as virtual reality and 3D visuals, and provide them with 360° view and visual experience of the underwater. In this scenario, they also feel that they are part of the marine life. This method of visual learning provides multi-sensory stimulations and sparks their imagination. There are certain rhymes like slippery fish created for autistic kids to develop their oral as well and listening skill.

Similarly watching an animated movie such as Lion King, Dumbo or Frozen is such a visual treat as it brings the emotions such as anger, fury, love, envy, excitement, confusion, joy, anxiety, anticipation, amusement, admiration, and many more. They do not need any language to understand them, thus breaking the language barrier.

**Online Games**

With aided technologies, the online game uses real-world locations and gaming environment with a plot, people, creatures, and many other things. Even if you are differently abled, you can ride cars, bikes, boats and many more. Special kids remain motivated by earning awards like stickers and balloon animals for each game they win. They have demonstrated improved ability to complete puzzle game tasks when compared to the use of traditional paper-based methods.

**Conclusion**

Today, assistive technology provides umpteen visual learning aids to the differently abled. However, we as visual communicators succeed when we empathize with our end user and think visually putting ourselves in their zone.
UX AND CONTENT: An exceptional content experience

Rekha V, Akhil Harikrishnan

Abstract: Content is everywhere as ads and longform copy, images and videos, stories and metadata. But how effectively the information can be conveyed depends on the content strategy. Content strategy plays a crucial role in planning valuable, findable, meaningful content.

Today, content strategy is the process that ensures content is published, edited, republished and archived at the right times. It is also the process that plans for content that needs to appear in multiple places, sometimes at specific times, so that information can be personalized for specific endusers.

Content design aims at using data and evidence to give the readers the content they need, at the time they need it, and in a way, they expect. In this session we would walk through the principles of content strategy and user experience for effective execution of just about any initiative that requires or specifies the need for content creation, delivery, or management.

It is not possible to design a great user experience for bad content. If you’re passionate about creating better user experiences and have an eye for detailing then you must care about delivering useful, usable, engaging content.

Those who wonder whether the user experience or content strategy is more important are on the completely wrong path. You cannot have one without the other, and that is a fact.

Content strategy has always been the backbone for any company working on information and has been in existence for a very long time. In fact, large companies have been setting up separate strategy teams for effective reach to end users.

Purpose of a content strategy

- The core – the aspiration of all our communications
- Governance – who is responsible and accountable for our content
- Workflow – how content gets from inception to publication and iteration
- Substance – the crux of what we are communicating
- Structure – what we are publishing where

Rekha works with SAP Labs as a knowledge architect for the Oil & Gas industry solution. She has worked in various domains like Automotive, Aerospace & Defense in the early years of her career. Also the trainer for ABAP system documentation. She has an overall experience of 19 years in the IT industry. Her interests are in the area of new documentation concepts for customer centricity.
A good content strategy means our team is:

- Efficient – we know who is responsible for each step of the content production process and will have data to make quick decisions
- Confident – we are empowered to act based on data and pre-defined processes
- Always improving – a digital content strategy is always evolving to take advantage of changes in technology and user behavior

A good content strategy means our users are:
- Served high-quality, trustworthy, user-centered content
- More likely to trust our content
- On their way to becoming our brand champions

Is Content Strategy a Part of UX Strategy?

Technically? No, not really. While workflow and governance have direct impact on the end content product, they don't (and can't) live exclusively within the domain of UX. But substance, structure, workflow, and governance typically inform one another, which is where the content strategist can really make a difference. They can act as UX advocates to content creators, while keeping designers in "the real world" when it comes to things like content requirements and template designs.

Maybe it's easier to answer the question like this: not every content strategy needs UX strategy, and not every UX strategy needs content strategy. Yes, they're both required for the effective execution of just about any initiative that requires or specifies the need for content creation, delivery, or management. But that doesn't mean we need to push content strategy into every UX project, because sometimes, it's clearly unnecessary.

For example, a lightweight application redesign likely doesn't require a content strategist, although it probably could benefit from a smart copywriter familiar with usability principles. On the flip side, a content strategy project that focuses largely on content workflow and governance likely won't need to pull in a UX strategist but might need a good interaction designer to assist with workflow documentation.

Common Methodologies

As we understand now that content strategy can impact many aspects of user experience, the only apparent commonality is that all content strategy deals with content; that said, the methodologies that make up the work vary widely. Among these common methodologies are adaptive content, content governance, information architecture, and branding.

Adaptive Content
Adaptive content is a content strategy technique designed to support meaningful, personalized, interactions across all channels. Adaptive content replaces static content.

Organizations have reluctantly had to conclude that the one-size-fits-all approach no longer works. The evidence applies in varying degrees to customer and user journeys the world over, in the context of markets as diverse as fast-moving consumer goods and financial services to medical devices and electronic components.

**Content Governance**
Since the content strategist has the big picture view of the publishing process, editorial guidelines, and omnichannel needs, they are in the best position to recommend a governance model that will maintain the quality of the experience.

**Information Architecture**
Content strategy borrows and learns from IA to prioritize content, create navigable site maps, and ultimately help users find the information they need, in the places they expect to find it.

**Branding**
A good brand is simultaneously complex enough to have meaning, yet simple enough to stick in people’s minds. Brands are both visual, shown in logos and color palettes, and verbal, coming across in language and style of speech.

**UX Attracts, Content Attains**
There is no arguing about the importance of quality and no one can undermine the work of UX designers. However, if you bring the site to the perfection, you’ll still need engaging content to bring back the user. No matter how superficial you find your users to be, no one will spend their time on something that has nothing relevant to offer.
WEBVR_An unexplored frontier for delivering interactive Content Experiences

H Rajkiran

Abstract: Augmented Reality and Virtual Reality (AR/VR) are gaining ground amongst technical communicators as a revolutionary approach for documentation delivery. AR/VR apps for technical documentation are already making inroads in the Hardware and Manufacturing sector with its efficiency proven in imparting impactful learning experiences. The smartphone has made this technology accessible and cheaper in the past few years, and AR/VR content creation is simplified owing to a surge of AR/VR authoring software such as Vuforia, ARCore, and BlippAR.

The biggest roadblock to adopting these technologies widely has primarily been the high costs of purchasing and maintaining the required hardware. A typical piece of AR/VR hardware such as the Oculus Rift can cost upwards of $1000! Now, imagine if you could bring the power of these immersive and ground-breaking experiences straight into the humble web browser for $5 or less!

Web-based Virtual Reality (WebVR) does just this and more within a web browser using any AR/VR headset or a $5 Google Cardboard. If you don’t have a headset, that’s fine too. Most WebVR experiences are designed to work well on any device without a headset. WebVR forms a part of a larger framework popularly known as Mixed-Reality (MR) and is built on top of existing HTML using JavaScript and Angular.

Technical communicators now have a new playing field to deliver impactful content experiences using WebVR. You can use template-based tools such as A-Frame or Scapic or choose to build the app from the ground up with Unity or Unreal engines to include engaging hotspots and mark-ups in a virtual environment that bring up context-specific documentation pulled from a CMS or API.
In this session, I intend to showcase the possibilities of WebVR for documentation with a demo that illustrates its use cases for Technical documentation. We will also examine design and deployment considerations along with FAQs around this technology.

Augmented Reality and Virtual Reality has been a hot topic for discussion amongst technical communicators and digital content creators for the last few years. AR/VR works by placing digital content such as 3D objects, animation, images, or videos as an overlay over real-world objects or in a virtually simulated environment. It can improve the learning environment by making the entire learning experience more immersive, thus encouraging better participation and collaboration between users and the product. Users become active participants rather than mere passive recipients of instruction because it allows them to interact with knowledge. Both AR and VR have shown tremendous scope to deliver content to audiences in a way that is far more impactful than a standard book-styled manual.

Companies like Ikea, Nokia, Aston Martin, Thyssenkrupp, and Bentley have successfully used AR/VR technologies to deliver complex user manuals and field guides for their products with excellent customer feedback.

The major reason why companies shy away from embracing AR/VR for delivering technical content can be attributed to the use of high-end hardware equipment often needed to deliver these experiences. A mid-range AR/VR headset can easily cost upwards of a $1000! Large amounts of processing power are required to run VR, and even AR which can be delivered via Smartphones needs a processor capable of generating a seamless experience. These factors have somewhat discouraged the widespread adoption of these cutting-edge technologies although authoring content for these technologies is becoming relatively easier.

Web-based Virtual Reality (WebVR) could potentially be the answer to these bottlenecks and could lead the way in delivering highly engaging and interactive visual content to your users! Technical communicators can leverage the power of WebVR to explore new frontiers to deliver engaging and effective technical documentation.

**What is WebVR?**
WebVR is an open specification that makes it possible to experience VR in your web-browser. It allows for anyone to experience VR, no matter what device you have. WebVR is part of a larger framework of AI-based technologies like AR and VR which is built on existing HTML and JavaScript that lets you enjoy immersive 3D, virtual reality experiences in your browser. The best thing about WebVR is that you can experience content created for it even without owning an AR/VR compatible piece of hardware.

**Why WebVR?**
A few reasons why WebVR is the next big deal:

- Google and Mozilla are heavily invested into this technology and have been updating their browsers constantly to support more advanced WebVR experiences.
- Oculus (leading VR developer) announced the development of a WebVR focused browser called 'Carmel' in 2016.
- The W3C organized the first workshop about the Web and VR in San Jose, bringing together top engineers and designers involved in WebVR development.
WebVR moved closer to a public version in most of the browsers.

**What devices is it compatible with?**
WebVR is compatible with all the current popular virtual reality platforms. This includes HTC Vive, Oculus Rift, Google Daydream, Playstation VR, Samsung Gear VR and Windows Mixed Reality headsets.

**What if I can't afford an expensive headset?**
Users without a dedicated virtual reality headset can use Google Cardboard, which starts from less than $5 and can still deliver an impressive VR experience. You can experience WebVR even without a headset as long as your browser supports WebVR.

**What browsers will it work on?**
WebVR is currently supported (with an additional WebVR plugin) on most popular browsers like Mozilla, Chrome, and Microsoft Edge. WebVR support for newer browsers and stable builds for existing browsers is already in progress.

**How does it work?**
WebVR allows web applications to present content in virtual reality, by using WebGL with the necessary camera settings and device interactions (such as controllers or point of view).

**Why WebVR for Technical Communicators?**
Technical writers can use WebVR as one of the channels to deliver customer-facing technical content. Some of the benefits are:

- Allows users to access visually engaging content with just a URL on a browser.
- Seamless integration of WebVR API with existing Content Management Systems (CMS).
- Develop interactive field/service manuals for hardware products like servers, storage systems, or networking equipment.
- Supports a range of devices and even works on Google Cardboard headsets.
- Merge existing video content with contextual information for an interactive experience.
- Create engaging hotspots and mark-ups to bring up existing technical documentation from various sources like XML or other documentation repositories.

**What are the typical use cases for WebVR in documentation?**
WebVR is best employed for delivering:

- Procedural or Task oriented content (Installation Guides/Field Manuals)
- Interactive product trainings
- Getting Started content
- Interactive and 360° video content

**How do I author WebVR content?**
There are many authoring tools on the web from top developers like Google, A-frame and Scapic that lets you build great WebVR experiences with minimal coding and graphic design knowledge. The best one I have used so far is A-Frame. It is developed by the Mozilla VR team and one can implement easy-to-use HTML elements along with an A-Frame script to build great experiences.
See for yourself!

- See how Google wants to transform the web with WebVR and why you should pay attention: [https://youtu.be/Izrqrji_2xk](https://youtu.be/Izrqrji_2xk)

What happens to your feedback after you send it down the Rabbit Hole!

Abhijit Das, Vimal Chhutani

Abstract: The quality of your customer engagement and interaction is the single most driving factor in achieving customer delight. In our case, direct feedback on documentation is perhaps the best input possible to improve our documentation’s quality. Almost all doc sites today, ask users to provide feedback on how we can better the documentation. And we get a lot of feedback! But what are we doing with that information? In an agile world are we quick enough to acknowledge, rectify and address the feedback we receive? Could we classify comments in categories and prioritize them accordingly?

What is a good enough SLA or TAT? Are writers comfortable with SLAs?

How do we do this in large setups with global writing teams? Are there best practices or an acceptable benchmark? Could we analyse trends and anticipate where we’ll get more comments in a specific release or period?

What if your existing process isn’t equipped to effectively manage the feedback you’re receiving? Stumbling upon these questions as we triaged and assigned thousands of feedback emails, we decided to give automating it a shot. By letting the tools handle the repetitive, yet time-consuming tasks in our own processes we make work better for us, as well as provide better results for our customers.

Some of the key benefits of automating task assignment:

- Increased Customer satisfaction
- Increased Writer productivity
- Increased Support productivity
- Eventual Reduction of support tickets!

The one question that drives our quest for feedback is ‘How can we make the documentation better?’ In answering this question, we take you along in our journey through this rabbit hole in a DITA world!
The quality of your customer engagement and interaction is the single most driving factor in achieving customer delight. In our case, direct feedback on documentation is perhaps the best input possible to improve our documentation’s quality. Almost all doc sites today, ask users to provide feedback on how we can better the documentation. And we get a lot of feedback!

But what are we doing with that information? In an agile world are we quick enough to acknowledge, rectify and address the feedback we receive? Could we classify comments in categories and prioritize them accordingly? In this presentation we ponder over some of these questions.

What is a good enough SLA or TAT? Are writers comfortable with SLAs? For all practical purposes, a typo or a formatting or linking error should not warrant the same time to closure as, something like missing information due to a GUI change or a change in functionality. Will it be practical to have a one size fit all, or will it be an implementation and tracking challenge, if we have different SLAs for different categories and complexities of comments received? Is it possible to carve out some time every day or week or sprint to tackle customer feedback? How else do we prioritize customer comments or doc feedback requests along with our scrum and product enhancement tasks?

How do we do this in large setups with global writing teams? Are there best practices or an acceptable benchmarks? Could we analyse trends and anticipate where we’ll get more comments in a specific release or period? Would it not be natural that the feedback received on a Service Pack or a Hotfix, be related to specific fix scenarios as opposed to a major release prompting feedback on the generic install / upgrade scenarios? Can we not bolster the FAQs section based on some of the recurring feedback, thus reinforcing the information in an easily consumable format, as well as relevant and requisite updates to the documentation?

What about overlapping and possibly repeated information in Knowledge Base articles published by Support and Services as well as similar content in the product documentation. Can we manage the content in a way that one complements the other? Is there a way we could optimize the content from multiple sources and make sure that they still show up for the same set of keywords on a search?

What if your existing process isn’t equipped to effectively manage the feedback you’re receiving? Let us take a look at processes and standards followed by various organizations, and arrive at commonly implementable best practices across the industry.

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Abhijit has a Master’s degree in English Literature, aspires to play at the World Series of Poker championship, and someday publish something other than technical documentation!
One of the indirect advantages of addressing customer feedback promptly is the fact that more often than not, dissatisfied customers who are unable to find the information they’re looking for, will end up creating support tickets and add to the ticket queue handled by support. By closing the loop on such tickets raised for missing information or documentation defects, we could potentially deflect subsequent tickets on similar queries already addressed. Proactively, addressing the feedback and updating the documentation not only deflects the traffic that support needs to handle, but over a period of time, should logically lead to reduced tickets on identified / repetitive comments.

Customer comments also provide a fair amount of context that the product documentation may or may not entail. Often this is so, because we intend our documentation to be generic and not focus on corner cases or specific customer scenarios. However, if we continue to get feedback on the need for more use-case/ scenario based content, maybe we could weave the content around some standard use cases which we could extend to multiple features and functionalities.

Stumbling upon these questions as we triaged and assigned thousands of feedback emails, we decided to give automating it a shot. By letting the tools handle the repetitive, yet time-consuming tasks in our own processes we make work better for us, as well as provide better results for our customers.

Some of the key benefits of automating task assignment:

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- **Eventual Reduction of support tickets!**

The one question that drives our quest for feedback is ‘How can we make the documentation better?’ In answering this question, we take you along in our journey through this rabbit hole in a DITA world!
Why We Do What We Do

Vishakha Naik

Abstract: Have you ever wondered why you were advised to use active voice or to use minimalism? Did you ever think why you have to follow other such guidelines?

Most of us intuitively know that these are the right things to do but it always helps to understand the theoretical framework and basis in research that support these right things. When you make certain decisions on designing and presenting information, this understanding helps you communicate and justify your decisions better and get a quicker buy-in.

The session will examine some typical Technical Communications guidelines and explain the theories behind those such as,

1. **Learning theories**: Explore the research done in the field of Psychology to understand how humans comprehend new knowledge and retain the information.
2. **Andragogy**: Learn the traits of adult learners to cater to their needs efficiently.
3. **Bloom’s Taxonomy**: Define the level of knowledge that the target audience demands—Knowledge or application?
4. **Dale’s cone of experience**: Redefine the cone of experience for effectiveness of information delivery.
5. **Kirkpatrick’s Model of Evaluation**: Evaluate the effectiveness and ROI of your documentation using the four levels of Kirkpatrick’s model.
6. **Mayor’s Principals for Multimedia Learning**: Discuss some of the important principles that help us justify design and structuring strategies.
   a. **Coherence**: The best learning materials limit extraneous content. Keep it simple. Think of the many ridiculously dense, loud, cluttered slides you’ve seen from time to time. It’s very hard to learn from content like that.
   b. **Contiguity**: The two contiguity principles inform us that people learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen, and when corresponding words and pictures are presented simultaneously rather than successively.

While talking about the similarities and differences in the role of an Instructional Designer and a Technical Writer, I have always emphasized that Technical Writers do a powerful job of conveying information using exact, apt, and simple language. IDs have media to support the

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text and thereby convey the information using variety of mediums. But for a tech writer, the only power is their ability to wordsmith.

During your tenure so far as a Tech Writer, you must have come across situations where you had to justify your design decisions. Wouldn’t it be great if you can provide a substantial rationale for your decisions?

Have you ever wondered how our invisible forces always guide us to do the right things - most of the time? You decide to chunk the content in a particular way, you decide to use bulleted or numbered list for certain text, you decide to use an org chart or a process flow diagram, sometimes you choose to add use cases and so on. What guides you to take these design decisions? You seniors? Style guides? Your colleague friends? What guides them to so?

The roots of most of the design related best practices lie into the study and research of how humans perceive information and designs. Scientist in the field of Education and Psychology have done immersive research to understand human brain, emotions, and behavior in general.

I am going to share my understanding of some of such theories and research that support most of our design and content structuring decisions. The intended objectives of my session are to:

• Encourage you to read and study research related to content design
• Help you identify theories that support best practices in documentation
• Empower you as writers and designers by initiating a thought process

Some of the theories that were established as a part of psychological experiments help us understand about how humans learn.

• **Behaviorism**: As per this theory, new behaviors can be learned through conditioning. Human brain can be conditioned to acquired new perceive of knowledge.

• **Cognitivism**: Human being learn better through associations. When you present new knowledge in the context of existing knowledge, human grasp it easily. It encourages their problem-solving capacities and encourages active participation.

• **Constructivism**: We leans through creating our own experience’s rather than just learning things through conditioning or associations. It is important for us to understand the real-life context of the newly presented piece of knowledge.

• **Andragogy**: It is important to understand the traits of adult learners since most of us deal with grown up learner. They tend to be self-directed, have previous experience in the related field, are ready to learn, are problem-oriented, and are internally motivated.

• **Cognitive Overload**: Information has to be provided in a spaced-out manner and in chunk to avoid cognitive overload. Using infographics, charts, graphs, mind maps are some of the ways in which we can avoid cognitive overload.

**Models:**

• **Bloom’s Taxonomy**: Benjamin Bloom talked about the hierarchical order of cognitive skills that can help teachers teach and learners learn the new information. It is important to understand
the expected level of knowledge and then decide the amount of information that should be presented. It not just helps the target audience find what they are looking for but also ensure that designer present it the desirable format.

- **Dale’s Cone of Experience**: Edgar Dale introduced the cone of experience long back in 1946 but it still applies to our preferences in learning new information. The cone emphasizes the importance of direct learning experiences over reading. Now this is something which all of us already know and is also very obvious. But it was for the first time he provided some statistics that showed that we tend to remember only 10% of what we read but 90% of what we do. With such vast difference in the amount of information retention, it is not difficult for us to choose the right and effective mediums to convey the new knowledge.

- **Kirkpatrick’s Evaluation Model**: Kirkpatrick’s model of evaluation is probably the most widely used model to measure the success of trainings. It measures the success across four levels - learners’ reaction, learners’ behavior change, ability to meet the learning objectives, and the returns of investment for the organization.

**Principles:**

**Mayor’s Multimedia Principles**: Mayor has stated 12 multimedia principle taking into consideration some of facts. He worked on the assumptions that humans perceive information through dual channels, human brain has limited capacity, and there is a need for active learning. Out of the twelve principles, six of his principles directly apply to some of the best practices that Technical Writers follow.

- **Multimedia Principle**
  People learn better from words and pictures than from words alone.

- **Coherence Principle**
  People learn better when extraneous words, pictures and sounds are excluded rather than included.

- **Signaling Principle**
  People learn better when cues that highlight the organization of the essential material are added.

- **Spatial Contiguity Principle**
  People learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen.

- **Temporal Contiguity Principle**
  People learn better when corresponding words and pictures are presented simultaneously rather than successively.

- **Segmenting Principle**
  People learn better from a multimedia lesson is presented in user-paced segments rather than as a continuous unit.
Segmenting Principle

People learn better from a multimedia lesson is presented in user-paced segments rather than as a continuous unit.
WYSIWYG - Writing for AD-HOC Requests-New Beginnings

Rama Vasudevan

Abstract: “It’s not what you look at that matters, it’s what you see” – goes Henry David Thoreau’s famous words – something that ties in with our current topic of “Writing for Ad-Hoc Requests-New Beginnings!” If you are wondering how – my point is, the way we look at things matter, and it may matter a lot!

There is no question that we have all risen to the occasion and met these ad-hoc requests, one time or the other. But have they made any difference to you – did you come up with the next big thing for your group or made any significant contribution to your organization because of these ad-hoc requests? Or, have these requests been something that you have had to fret over and somehow got done with?

What I have observed in my experience is that these ad-hoc requests might be a minefield for ground-breaking ideas, great solutions that might help our team, testing and learning opportunities, and so much more. Possibly, these requests can lead to our growth and great fulfillment at work, lasting friendships to remember and cherish, and so on. To know whether this is not something out of fiction, but it is something that we can all try it out for ourselves, be tuned for the presentation at STC India 2019 conference at Chennai! Let’s meet and discuss the wonderful possibilities that lie in these deceptively wrapped prickly ad-hoc requests!

Why is writing for ad-hoc requests be the start of something new? Are you of the same opinion too? After all, haven’t we all had a brush with writing for ad-hoc requests at some point or other – experiencing the rush of adrenaline and contributing in the best way that we know of? I’m sure there’s no one among us who cannot say “been there, done that.”

Though we have all walked this street, this presentation is about how we view this situation of “writing for ad-hoc requests” that comes raining down on us - out of the blue:

1. Do we view this as an opportunity to learn, to improve the processes, to come up with ideas, to brainstorm, to test new solutions, etc.?
2. Or, do we view this as an untenable situation – in the process, transforming this situation into something that has a direct impact on our health?

I agree that we are neither this nor that (#1 or #2) and it all depends on the day!

For fun, let’s start with: What do you all see in the following pictures?

As a person trained in photography, one may find numerous things that can be improved upon in these pictures! However, if I see these pictures through a child’s eye, here’s the story I see:

The bravest pilot in the whole universe plots to have a rendezvous with none other than the might SUN! In this seemingly impossible mission, he’s joined a motley crew – a team of 20 people, cherry-picked for their enthusiasm and world-renowned accomplishments! The pilot, who’s also one of the world-renowned scientists had to battle many things – top among them was to find a material that would withstand sun’s impossible temperature. He had to search length and breadth of the universe – only to find the wonder material in our own planet earth, in the deepest hidden depths of Mariana Trench!!!... And after all the hurdles are overcome, the pilot and the crew make the bravest attempt ever known to mankind/other planetary folks–a powwow with the SUN – and there they emerge VICTORIOUS!

So, the conversation about these pictures can be a story or a dissection of what maybe wrong with these pictures...Both conversations are illuminating and interesting in their own right!

So, what is the whole point – many of the things might appear welcoming or scary based on how we take look at it – at least some of the times. Do you agree? For example, the last-minute requests can be disconcerting or maybe it’s your next opportunity to explore something that’s fun/interesting/etc.

There are a few things that we might learn along the way when we attempt these last-minute requests:

**Prioritization/Negotiation**

It maybe a no brainer – the last-minute requests make us re-prioritize our work – bumping up the ones that need our immediate attention.

They also help us develop our negotiating skills with the stakeholders. Haven’t we all had a discussion what we can do and what we can’t in the time that’s available?
Here’s a quick sketch of what it might look like – leading us to improve our time-management and project-management skills:

**1. Prioritize/Negotiate**

Seek/Extend Help

A few questions that come to mind:

1. When we have access to internet, do we still request for help from others?
2. If we do, when do we?
3. Do you go to anyone for help or do you have a few that you reach out to, most of the time?

In my opinion, we often reach out when we have exhausted most of the ways at our disposal to arrive at a solution. Also, we mostly reach out to folks who extend a helping hand – who are there for their team in their success and challenges. What these interactions can lead to:

- Is a healthy working relationship over the long term
- Working on many interesting projects
- A bird’s eye view of your group/organization

New Tools/Solutions

Again, starting with a few questions:

- When we are hard pressed for time, how many of us pursue new tools?
- Any interesting tools that you have across during a time crunch?
- Any solutions that you could arrive at for the group?

When the time is tight, I believe there’s an opportunity to stumble across many tools or arrive at solutions that meet our needs. For example, in our team, we have explored a few solutions for managing:
Unused conditional tags
Color definitions

New Ideas/Processes

Have we not all tried to make things easier for us?

We often come up with new ideas and improve our processes, so that we are better equipped to meet the next avalanche of ad-hoc requests. For the changing needs, haven’t we tried:

- New templates
- New processes
- New checklists
- Quick references

To Summarize

Ad-hoc requests make us grow and in the process, probably help the organization grow too:
Ad-Hoc Requests

I leave it to you...the way you see things...

From the Web
Thanks to the inimitable B. Watterson