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Content tiering

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Capturing participants from any culture

Augmented Reality

Taking instructions out of the manual and bringing them into the real world

imprint

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From the editor

Imagine driving down the street while corresponding graphics and audio information about the restaurants or other services you are passing are displayed to you. Imagine holding a can of soup in the supermarket while information on ingredients, nutritional value and even product reviews are revealed right in front of you. Imagine drawing a circle on your wrist to project a watch with the current time on it. Sound like scenarios of a distant future? Of course not.

These are all features enabled by Augmented Reality (AR) – a technology that adds graphics, sounds, haptic feedback and even smells to the natural world surrounding the user. Video game developers have long been experimenting with the endless opportunities that become available through AR, and today the graphic heroes and villains are pulled out of computer screens and superimposed onto the real world.

Retailers such as IKEA are also on top of the game. They've developed an app that lets users virtually furnish their homes with items from the IKEA catalogue. Allegedly, even the US military is using AR devices, for example, to perform reconnaissance on an opposition hideout with the help of satellites.

Needless to say, Augmented Reality also provides a myriad of opportunities as well as huge benefits for technical communication. According to research firm Gartner, AR has "the potential to improve productivity, provide hands-on experience, simplify current processes, increase available information, provide real-time access to data, offer new ways to visualize problems and solutions, and enhance collaboration." In spite of all these fantastic options, technical communicators have been slow to adopt the new technology.

So what are we waiting for?

In this issue of our magazine, Juergen Lumera describes how Augmented Reality is about to change the work landscape of technical writers and what opportunities and challenges lie ahead (page 13). Dirk Schart sheds light on the devices that are already available, as well as their advantages and drawbacks (page 16).

Two noteworthy industry events came to a successful close in March. The tcworld India conference brought inspiration and learning opportunities to more than 300 participants. Also, the tcworld China conference made its debut in Shanghai with around 70 eager participants. You can read more on both events starting on page 36.

Corinna Melville

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Augmented Reality

Augmented Reality allows developers to superimpose graphics, sounds or even smells onto the real world. For technical communicators, it offers the chance to lead the user without a manual, by virtually standing behind him and guiding him through a task. What technology is already available and how can we use it?

page 12

Content tiering

With ever-growing amounts of content, organizations are faced with the challenge of prioritizing content for translation and localization.

page 21

Creating effective presentations for a global audience

Capturing your audience abroad might be an entirely different challenge than grabbing the attention of listeners at home. So how can we adjust our presentation so that it appeals to audiences in the US as well as in Japan?

page 31

A stronger focus on customer experience

SDL has unveiled the latest in customer experience research with its new study, *The Retailer's Imperative: A Strategic Approach to Customer Experience*. Findings from the online survey, conducted by Econsultancy in conjunction with SDL, reveal that North American retailers are past the stage of debating the importance of customer experience management and are now trying to master it.

"Mastery of the customer experience is a challenge with many facets. Retailers are overwhelmed by the complexity of data, technology and understanding of the customer journey," said Paige O'Neill, Chief Marketing Officer at SDL. "Our latest research indicates that North American retailers are acutely aware of their technological shortfalls when it comes to creating a seamless, personalized customer experience across multiple channels."

Image: © elwynn/ 123rf.com

The online survey, which was sent to more than 225 senior marketers at North American retail companies with annual revenues of more than $100M, revealed some key findings.

Customer experience importance on the rise

Increasingly, companies understand the importance of delivering a superior customer experience (CX). The combination of intense competition, more demanding customers, and an increasing range of channels, mean that organizations must continually improve the service they offer to consumers if they are to retain business – regardless of the sector they're in. In fact, the vast majority (80 percent) of retailers surveyed are increasing their customer experience budgets, and one in three is planning a significant increase of more than ten percent from their current level. In addition:

- Among the respondent organizations, none plan to reduce their CX commitment in 2015.
- Nearly half of retailers strongly agree with the statement "our customer experience is our brand" – a remarkable figure that balloons to over 80 percent when those who simply "agree" are included.

Customer experience is the path to higher profit

While many retailers view CX as a tool for higher conversion and retention, they don't necessarily see the connection to acquisition. This is an important disconnect, and one that creates a competitive advantage for those focused on content and social marketing. When asked about the ways they can differentiate themselves and attract new customers, retailers were varied in their responses.

- Despite the realities of commoditization and competition, most retailers point to product offerings (54 percent) and price (45 percent) as their primary methods for attracting new customers.
- For 45 percent of retailers, content is a tool to grow their audience, often in tandem with social reach.
- Omni-channel retailing is cited by 22 percent of marketers. This reflects the challenges in creating a truly seamless experience, but also highlights that it can be a powerful differentiator for those who achieve it.

Integration is lacking across customer experience technologies

Realizing that they must create consistent and engaging experiences across a multitude of online and offline touch points to compete in today's business environment, many organizations are attempting to establish true integration across systems and technologies.

- The research shows that North American retailer brands appreciate the need for technology integration, with 97 percent citing integration of CX technology as "important" or "essential" to their growth.
- However, only 40 percent describe their relevant systems as integrated and cross-functional, revealing a significant gap between the industry today and where it needs to go.
- Only two percent have no plan for integrating their technologies at all.

Mobile customer experience is an untapped resource

Mobile commerce is among the fastest-growing segments in retail, as smartphones and tablets play bigger roles in the shopping journey. More and more brands are taking mobile commerce by storm, offering both mobile applications and mobile-optimized sites to their customers. The research reveals that mobile has been a dominant priority for retailers across 2013 and 2014, and that investment has paid off.

- More than 50 percent now say they have a strong understanding of the mobile user experience.
- However, only a third of retail marketers (35 percent) believe they can distinguish themselves as a company using mobile.

The challenge is for retailers to move beyond usability in mobile and advance to more sophisticated merchandising. An increasing percentage of buyers are mobile-only, especially in younger demographics, and their numbers are growing quickly. This presents a challenge in creating an experience that's simple enough for the small screen, but involves the consumer with the brand and opens up opportunities for continued shopping and loyalty.

The complete results of *The Retailer's Imperative: A Strategic Approach to Customer Experience* study are available online:

www.sdl.com/download/econsultancy-retailers-imperative/76876

CALL FOR PAPERS: ETC 2015

The Evolution of Technical Communication Conference (ETC) 2015 is inviting speakers to submit their papers on the topic of innovations in software documentation. The ETC 2015 will take place in Sofia on June 19th. The event provides a platform for tech writers to spread their knowledge and get to know each other.

www.technical-communication.org

CALL FOR PAPERS: TCWORLD CONFERENCE 2015

tcworld invites experts from the entire process of information development to apply and present their knowledge and experience to an interactive global audience. Don't miss this opportunity to speak at the biggest event in technical communication worldwide. The call for papers runs until April 30, 2015.

conferences.tekom.de/tcworld15/tcworld15/

MADCAP PARTNERS WITH METAIO

MadCap Software, Inc., a multichannel content authoring company, has partnered with Metaio GmbH, a provider of Augmented Reality research and technology. The combined solution enables writers to create content elements that users can scan with mobile devices to access other content sources such as audio, video, 3D models and animations.

www.madcapsoftware.com

PARAGON ACQUIRES IN EVERY LANGUAGE

Paragon Language Services has acquired translation provider In Every Language. The acquisition comes at a time of aggressive organic growth for Paragon, which has seen a 258 percent increase in revenue over the last four years. The acquisition adds telephone interpreting, website translation and mobile app localization to Paragon's service offerings, in addition to strengthening the company's medical device, manufacturing and tech sector client base.

www.paragonls.com

Enabling globalization teams to build sustainable funding models

Image: © Burmakin Andrey/ 123rf.com

Independent market research firm Common Sense Advisory has collected updated data about how buyers of translation services manage their spending. The firm has conducted interviews with managers and directors responsible for translation and localization budgets at 37 global companies in ten industries in eight countries. The results are published in the report *Take Command of Your Translation Budget*.

The research findings confirm that budget administration and execution tend to be centralized, but funding is not: 83 percent of interviewees report that they are responsible for executing a large portion or all of their organizations' translation projects. In contrast, only 25 percent own and control a centralized budget. The remaining 75 percent share funding ownership with other functional areas, business units, or product lines.

Interviewees cited various advantages and disadvantages of not owning their budgets, including:

- Accepting money from other units limits strategic reach. Several of the localization managers interviewed believe that relying on money from other groups condemns their teams to a purely operational role – rather than the more strategic one they should play. When money is tight under this model, translation is often considered an expense that drains resources from core business requirements. This forces localization managers to renew financial support or deal with a reduced budget.
- Centralized funding provides freedom to invest. Allowing business units or corporate teams to manage their own funds encourages them to invest wisely in translation, as they then have a stake in what happens with their money. However, localization managers can more easily add staff, automate processes, and train vendors when they own the budget.

Comments Rebecca Ray, the report's lead analyst, "Budget ownership is power. While giving control of the language services budget to the localization team is the clear choice for supporting a global operation, such power appears only in more evolved organizations. We found that the switch to a higher degree of budget ownership happens as the organization gains in localization maturity.

This research shows that localization managers must use a variety of budgeting and alliance-building techniques to juggle two areas to be successful with their funding strategy: 1) expose enough data to demonstrate that they are good stewards of company funds; and 2) maintain enough camouflage to ensure flexibility as they adapt to shifting priorities.

Ray concludes: "Organizations that are focused on international expansion should enable their globalization teams to build sustainable funding models based on 100 percent budget ownership. Doing so will allow translation and localization managers to invest appropriately to support the global growth strategies of their companies."

More information on the report is available online:

www.commonsenseadvisory.com/AbstractView.aspx?ArticleID=21614

Ethical programming for smart machines

According to research firm Gartner, Inc., CIOs must start considering how to develop ethical programming for smart machines.

Realizing the potential of smart machines – and ensuring successful outcomes for the businesses that rely on them – will hinge on how trusted smart machines are and how well they maintain that trust. Central to establishing this trust will be ethical values that people recognize and are comfortable with.

"Clearly, people must trust smart machines if they are to accept and use them," said Frank Buytendijk, research vice president and distinguished analyst at Gartner. "The ability to earn trust must be part of any plan to implement artificial intelligence or smart machines, and will be an important selling point when marketing this technology. CIOs must be able to monitor smart machine technology for unintended consequences of public use and respond immediately, embracing unforeseen positive outcomes and countering undesirable ones."

To ensure that smart machines behave ethically and deserve our trust in the future, CIOs must prepare for ethical discussion and programming. Gartner has identified five levels of programming and system development based on their ethical impact, which are outlined on its website.

www.gartner.com

tcworld GmbH takes over the Information Energy Conference

tcworld GmbH in Stuttgart has taken over Information Energy, a conference established in Utrecht, the Netherlands.

Since March 4, 2015, tcworld GmbH has owned the rights to the conference. Wim Hooghwinkel, founder and developer of Information Energy, will still be responsible for all tasks related to the program topics as well as the event management.

With its takeover of the Information Energy conference, tcworld GmbH, under CEO Dr. Michael Fritz, is expanding its portfolio of conferences as well as its range of topics beyond technical communication. In the future, the focus of Information Energy will be on information management (Enterprise Information Management).

The range of topics at tcworld conference 2015 (November 10–12 at ICS in Stuttgart) will thus also be broadened. For this conference, Wim Hooghwinkel will be responsible for the content creation of the "Information Energy" track.

About Information Energy

This year's conference will take place June 3–4, 2015 in Utrecht, the Netherlands and will focus on the topic "Content as a service – turn data into information and information into knowledge". The conference program covers topics such as user experience, enterprise content and big data, structured content intelligence, and e-learning.

Information Energy is a two-day event. The first day is a conference day with international speakers and visitors. On the second day - tool's day - solution providers are invited to present, and attendees are invited to participate, in forums and interactive sessions.

You will find more information on the conference website:

informationenergy.org/2015/

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tcunplugged

Games: Play your way to better documentation

Image: © Burmakin Andrey/ 123rf.com

By Leah Guren

I teach courses and workshops in writing and editing. Often, a manager tells me, "My writers understand the rules, but they don't seem to be able to apply them. Help!"

I teach about the reasons for writing simple, clear language. I explain the benefits of using present tense and active voice. I cite readability statistics about sentence length. I show examples. My students nod their heads wisely, yet seem unable to actually put these rules into practice. "Passive voice should be avoided," wrote one student in a homework assignment. (Sadly, he was not aiming for ironic humor.)

Why does this happen? Why are TechComm managers all over the world pulling their hair out? The answer in one word: *habit*.

Through the long years of primary and secondary education, people set their natural writing style. They are taught rules of punctuation, written syntax, and the structure of an essay. The problem is that traditional education (and academic writing) stresses complex vocabulary, passive voice, future and past tense, long sentences, and a ton of pompous fluff. So why are we surprised when TechComm practitioners cannot instantly abandon years of reinforced bad habits?

Lecturing someone about writing style only goes so far; to change writing, we must find a way to change habit. The only way to do that is to replace it with another habit. And the only way to do ***that*** is to practice, practice, and practice some more until it becomes second nature.

But rather than making writers practice with long, boring drills, managers can "gamify" the process. Researchers at Stanford University have shown how playing games is the natural way to learn.[1] It certainly is more fun!

Here are four of my favorite games that TechComm managers can use to change their writers' habits and help improve the usability of the documentation:

1. Word count challenge. The manager finds a piece of text (100–200 words). It can be from legacy content. It should be fluffy (wordy, pompous, full of long sentences, etc.). The manager gives it to each writer. The challenge is to rewrite it, preserving the technical meaning, in as few words as possible. This can become marvelously competitive as the scores go up on the board.
2. Shake up the structure. The manager creates a dense block of text (up to 300 words) with no structure at all. Ideally, this should not be from legacy content, but something participants have never seen. The manager divides participants into small groups. Each group must identify the hidden structure in the content and present the most logical, usable solution. For example, the content may best be represented as a table, or a flowchart, or an infographic, or a procedure, etc. For the very brave: make teams act out their structure in pantomime. This game usually leads to a lot of laughter and some lively discussions.
3. Decipher and decode. The manager finds the most obscure, complex, overwritten sentences. Each writer must decode the text and rewrite it in plain, simple language.
4. Live within your budget. This is a variation of the word count challenge. The manager sets a word count budget for the week (or for a specific set of content). If the group stays within the budget, they win a pizza lunch for the whole team. If they go over, each writer has to pay into the kitty (for example, one cent per word over the limit).

Before trying games for writing skills, consider:

- Find games that suit your writers' problems. For example, if you are plagued with passive voice, create a game that focuses on that.
- Make the rules clear.
- Establish an arbitrator for determining the winning solution (this is usually the manager who sets the task).
- Set time limits. The best is when everyone is together, but some games, like the word count challenge, can be done by participants overnight.
- Provide prizes. Prizes can be as simple as a chocolate bar or discount coupons. One of my clients uses small plastic animals, which have become visible bragging rights when displayed on a writer's desk. The point is that people enjoy the game more when there is a clear winner and a real prize, no matter how trivial.
- Always provide time for discussion. A big part of the learning experience occurs when people can voice their different views, challenge assumptions, and ask questions.

Do you have an idea for a game to improve TechComm writing and editing? I'd love to hear it!

[1] "Playing to learn: Panelists at Stanford discussion say using games as an educational tool provides opportunities for deeper learning", Stanford Report, March 1, 2013 (http://news.stanford.edu/news/2013/march/games-education-tool-030113.html)

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Leah Guren is the owner/operator of Cow TC. She has been active in the field of technical communication since 1980 as a writer, manager, Help author, and usability consultant. She now devotes her time to consulting and teaching courses and seminars in technical communication, primarily in Israel and Europe.

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Augmented Reality

Taking instructions out of the manual and bringing them into the real world

How Augmented Reality impacts technical documentation

Augmented Reality is delivering ground-breaking opportunities in technical communication. But while the market is thirsting for more, technical writers have been slow to adopt the trailblazing innovation. A wake-up call to the tc industry.

By Juergen Lumera

For those of you who are not yet familiar with the emerging technology called Augmented Reality (AR), here is a quick introduction: AR allows superimposing 3D information onto a real-time video stream. The overlaid 3D information is positioned and scaled in perspective, giving the user the impression that the information is part of the scene. A common example is a streamed soccer game, where the offside line is occasionally superimposed to show whether the player was offside or not. Likewise, in American football, the remaining yards to the goal line are superimposed onto the field.
This article will show how Augmented Reality will impact technical documentation, what challenges lie ahead and what opportunities it will bring to technical writers.

Why is AR important for technical documentation?

Until recently, a technical author described a technical task with words and 2D or 3D graphics. To do so, he needed to predict how the technician or user would stand in front of the product and match the description with this position. The more complex the task, the harder it was to find the right combination of words and graphics to deliver a clear message and minimize misinterpretation. But even when an author did his best to describe a task for a generic situation, he couldn't guarantee that the task would be executed correctly. This depends on the ability of the user or technician to interpret the information correctly and apply it in the right place on the product. For example, the user might have had to transfer the information from a picture of a power switch to its actual physical location on the product in front of him. What the author has clearly been lacking so far is the ability to match the information he has created with the nearly infinite number of variations of how and where a product can be used or serviced. With Augmented Reality, this is now possible. The author produces information to be superimposed onto the actual physical product in front of the user or technician at the time of executing the task. The technical writer can now directly guide the consumer through the task more precisely than ever before.
AR allows the consumer to focus on the execution of the task, rather than on the interpretation and transfer of the technical content.

This is why Augmented Reality is relevant for technical documentation – particularly in a world where products become more and more complex, are sold globally and where users and technicians are not skilled enough to operate those products without assistance.

How will AR change the way we work?

We predict that Augmented Reality will fundamentally change the way we communicate with our consumers (technicians, users, operators, etc.). However, undoubtedly, it is still necessary to create content, because Augmented Reality is not possible without content. But creating content for AR will require new tools and – more importantly – a new way of thinking and planning when producing technical documentation. As mentioned before – with Augmented Reality, we guide and no longer explain.
This sounds simple, but in order to realize it we need to consider a few aspects – aspects that we haven't had to worry about so far.
For starters, Augmented Reality is heavily based on the visualization of 3D objects, and therefore, the author's main software will be a 3D manipulation tool. Rather than working

with CAD software, we will be working with 3D animation tools that are already on the market. But how a technical author uses these 3D tools is pretty different from the classical creation of animations. The author will have to decide what will be physically available, and which parts should be superimposed at what time. To do this, the author has to picture himself in the execution process and imagine what support a consumer might need at a certain time.

To create AR, we will have to imagine standing behind the user and showing him how to execute the task.

Next, we will have to think about different ways for the user to interact with our content: When do I use what information, and how can the user interact with this information? For example, when showing a bolt, will the user be able to click on it? And what will happen when he does (another augmentation, pop-up menu, video, etc.)? In the past, these decisions were typically made by software developers, but with Augmented Reality and the new tools, authors can (and should) make these decisions. After all, *they* are the experts in communicating technical information and they should be the ones who decide where to show specific information.

Finally, we need to keep end users' devices in mind: In the future, Augmented Reality will be used not only with traditional mobile devices like tablets or smartphones. More likely, it will be used with smartglasses. All three types of devices may require different approaches to prepare AR content – not just different resolutions and fields of view, but also different interaction mechanisms such as gesture control, voice recognition or touch screen functionalities.

The above points only cover some general requirements for authors preparing AR content. There are many more specific challenges (e.g. how to deal with changes in the product during dismantling), which no technical author had to face in the past.

What are today's challenges?

Today, AR technology to track and superimpose 3D content has reached a level where it can be implemented in production. Various companies like Metaio, Frauenhofer or Vuforia supply the technologies. What has been missing so far are tools to industrialize the AR content creation, integrate AR into existing tools and processes, and significantly reduce the effort to create new AR applications. But today, tools are hitting the market that support not only mass data creation, but also the management of different releases and permanent updates – the typical challenges for any type of technical documentation. Bosch, for example, provides a framework (CAP – Common Augmented Reality Platform) to manage and deliver AR content on a large scale.

One of the biggest challenges for a company getting started with Augmented Reality is the lack of objective information on how to introduce AR: What are the risks, what ROI can be expected, how can AR be approached, what legal aspects like safety or security are relevant, etc.

But while the tool landscape has been improving, new organizations have emerged that aim to provide exactly this bit of missing information. Organizations like AREA (Augmented Reality for the Enterprise Alliances, www.thearea.org) are quickly becoming the platform for questions related to Augmented Reality.

Apart from the demand for the cost-efficient creation of AR content, the biggest challenges lie in the limitations on available devices. Using a tablet or smartphone might work perfectly fine for an AR application, but it blocks the hands of the user. To get the most out of

Image: © Bosch

Augmented Reality, users need hands-free operation. This is possible with smartglasses and smart helmets. Although this market is growing, it still lacks some breakthrough features such as a wide field of view while still being light and comfortable enough to wear the whole day.
But hands-free devices generate another challenge for the technology as well as for authors: new ways to interact with the application via gesture control or voice recognition. We already touched on this point earlier. The goal is to eliminate the need to move the hand away from the task execution. The industry has promising solutions for this problem (like the Magic Leap sensor) for the technician or user. But this still leaves a challenge for the author, because he now has to build this into his content. He has to decide when which type of voice or gesture control can occur, how to react within the AR content, etc. This is a completely new area for authors – but there will be tools to simplify this task as the quality of smartglasses and smart helmets reaches production level.

What opportunities exist due to AR?

This is the first ground-breaking technology in technical documentation in a very long time (some might argue that 3D animation was a trailblazing invention, but it was more of an evolution than a revolution). Although the hardware has not yet reached a level that allows hands-free operation, there is still a huge potential for technical documentation. Implementing AR in technical documentation might require a small paradigm shift: Today the user does not operate the device while reading the technical documentation. He does this sequentially, by switching from the book (digital or printed) to the product he is working on and vice versa.
Replacing this approach with Augmented Reality will on the one hand speed up the processing of the information and eliminate errors that occur when transferring the information from the manual to the task at hand (e.g. interpreating a picture and matching it with the product). In addition, up to 80 percent of information is redundant with Augmented Reality.
Augmented Reality can already be applied to any kind of information: explaining how to operate a washing machine, showing a sales person the critical points of a new product, enriching a brochure with augmented information, combining training and technical documentation to allow on-demand training, visualizing complex repair and maintenance tasks.
Every author will instantly find multiple situations when explaining a task with more precision would be highly beneficial. Augmented Reality provides an opportunity to deliver this precision.

Are users ready for AR?

A typical question asked about Augmented Reality is whether users are willing to point their devices onto a product to receive instructions. Looking at the list of AR applications already deployed in the market, the answer is a clear YES. Perhaps you are in your living room while reading this magazine. If so, check out your latest IKEA catalogue. If you haven't got it, I suggest you grab one during your next visit. The catalogue allows you to augment your home with furniture by simply printing out a marker, placing it onto the floor and pointing your mobile device at it – just give it a try. Currently more than 100 million copies are distributed and readers are using it to visualize their new furnishings.
We all – pretty much independent of age – are using our mobile devices throughout the day. Therefore, the majority of the information we consume is already displayed on mobile devices. While most information is still delivered in traditional formats, more and more applications now also deliver content in Augmented Reality. Just search your app store for Augmented Reality and you will be astonished.
So the question is no longer *if* users are ready – it is *why* we as technical authors are taking so long to deliver more information via AR. While AR has already reached our daily lives, and innovations like the IKEA catalogue have proven how powerful it really is, the market is now demanding more.

And now what?

Communication with our clients, the consumers of our technical documentation, will fundamentally change: Augmented Reality gives us the ability to virtually stand behind our client at his home, work bench or sales room, looking over his shoulder and guiding him through a more efficient and accurate task execution than ever before. This will result in lower warranty costs and, more importantly, in higher product quality. The technology is ready to be used to make AR real for your products. Welcome to the new technical documentation world powered by Augmented Reality.

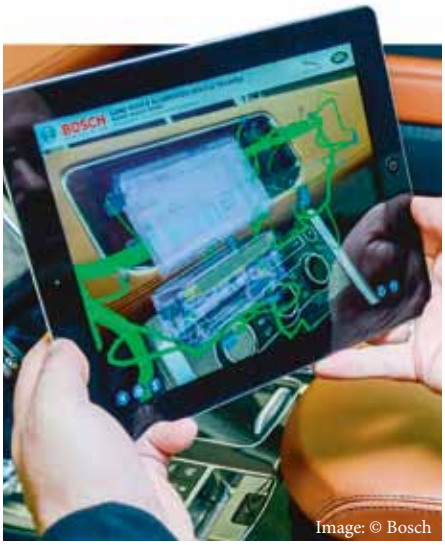

Image: © Bosch

A wire harness is superimposed onto a dashboard

contact

Juergen Lumera has more than 15 years of experience in XML authoring and delivery solutions. In his current role as Director at TIS Product Management and Innovation, he is defining the next generation of technical documentation system. He is especially interested in new trends and technologies for technical documentation.

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New realities: How we interact with digital content in the future

Augmented Reality (AR) is no longer just an innovative buzzword. Companies are looking for ever more intuitive ways to visualize the mountains of data they have on their servers. Even Facebook's Mark Zuckerberg considers AR one of the most important platforms for the next few years. So, how far has the technology come and which devices are already available?

Image: © www.microsoft.com

By Dirk Schart

Many people wonder why it has taken AR so long to mature. It is not that companies didn't see the benefits. Rather, the limiting factor has been the hardware. Now that hardware performance has improved, we also see a rapidly growing number of AR applications. We are already accustomed to smartphones and tablets. And now big players like Google, Sony and Microsoft are developing specific hardware for Augmented Reality – especially for the B2B market.

These new technologies have received a lot of media attention recently. Many new devices with fascinating concepts have been introduced in the past months. This is a clear indication that we are reaching the next level of AR business applications. Right now smartglasses and smartwatches are getting a lot of attention. Despite the euphoria that these latest wearable devices have generated, there is still one important question: tablet or glasses?

The time for Augmented Reality begins now

Steve Jobs' presentation of the iPhone in 2007 marked the beginning of a new age for Augmented Reality: For the first time you could experience AR without having to wear a heavy and uncomfortable helmet. Now we could access Augmented Reality with our own devices – devices that had a better performance than Neil Armstrong's computer in his legendary mission to the moon.

Since then we have become accustomed to smartphones, tablets, phablets and glasses. But the mobile revolution didn't just bring us more devices. Instead of buying software packages, we now download mobile apps for any kind of purpose. Cross-platforms like Unity offer software developers an easy way to create Augmented Reality apps for different devices and platforms.

While many people think that the demand for platforms corresponds to the sales of devices – it does not. Especially in B2B business, companies prefer iOS devices or Windows tablets. This is because their staff is already well familiar with the typical gestures for using an Apple device, such as zooming in with two fingers, etc. That means users don't need to expend much effort to learn how to use another Apple device, but can apply the same gestures on their new devices. Windows tablets are similarly attractive because Microsoft has the interfaces to standard software for databases or content management systems.

Why we need Augmented Reality

Before we take a closer look at the available devices, their benefits and individual use, let's talk about how our behavior has changed in terms of receiving information. Over the past 30 years, the number of media channels has increased from a manageable amount (e.g. TV, radio, newspapers) to an ever-growing mass of online and digital media as well as apps. The result: a daily battle for attention. As companies try to reach their target groups through various kinds of media, communication specialists face the challenge of choosing the right channel for their users or target groups.

Whether at work, at home or on vacation, we are constantly bombarded with information of all kinds. Whether we follow instructions or presentations at work, watch TV or browse the Internet at home – our brain constantly has to filter the important bits and pieces from the flood of information. And it has to do this in a minimum of time: According to studies, we are only able to record five percent of the advertisements we are confronted with. That means that 95 percent of those ads are actually not reaching us. We have learned to decide and select really quickly what we think is interesting or important to us. This means that if you want to explain or communicate something or send a specific message – you have to find your way into this selected five percent.

Content and context

So how can we reach people? To answer this, let's take a brief look at cognition science to see how we perceive content. One important factor is awareness. Think about yourself: when you are interested in something you become aware of the content. If you find yourself in a dangerous situation, you become alert. The better the content fits your current situation and location, the more awareness you have for the message or information.

It is not enough to only provide content. It is important to create and deliver contextual content – at the right time, in the right place and on the right device. Let me give you an example: Have you ever read the owner's manual of your car? No? What a surprise. Most people only read it when a warning light flickers on the dashboard and then spend valuable time searching for the cause in their manuals. With the right device and interface you will always have access to the right content at the right time and location.

One of the benefits of mobile devices is their ability to deliver contextual content. Modern devices like smartphones and tablets have many sensors integrated for contextual information. This means that it is not limited by the hardware. The applications simply have to use the devices in the right way. This offers fantastic opportunities and a completely new field for creating instructions for technical communication.

The next generation of devices

At the beginning I asked the question: tablet or glasses? This question is currently raised frequently. The big advantage of smartphones is that we have them with us at all times. ▸

contact

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We don't need any additional device for receiving contextual content. Many people think that smartglasses will replace tablets and smartphones, but this won't happen during the next few years. Nevertheless, smartglasses provide a huge potential.

If using a mobile device, you have to take it out of your pocket, maybe unlock it. Only then are you able to get access to the content. Smartglasses deliver content directly into your field of vision – exactly where you need it. This happens hands-free. This can be a big advantage if you are working or following step-by-step instructions to repair something.

Available and future devices

When describing smartglasses and future devices, we focus on three main areas: practical use, grade of immersion, and availability on the market. Practical use means: What can you already do with it, how comfortable is it to use, and how long does the battery last? Grade of immersion refers to how well a user can still perceive the real environment. The more closed the device, the stronger the immersion. Less immersion is common for Augmented Reality while full immersion is typical for Virtual Reality glasses. Finally, we take a look at whether the device is already on the market or still in development. As we are not able to show all the current and future devices in this article, we introduce an exemplary selection of wearables.

Below is a short introduction to some of the AR devices that are already available or will be released in the near future. Many more devices will be introduced over the next weeks and months. The devices presented here only provide an overview of the most important current developments.

How we interact

A functioning device is one important aspect – the user is the other. One of the most important requirements for the acceptance of new devices is that users can easily handle the new assistants. When we use them in private life, we are open to spend more time to discover the features and learn how to operate them. At work we might not have that time, so we might be quick to

GOOGLE GLASS

Many people think that Google Glass was built for Augmented Reality. However, the intention of Google was actually to provide users with contextual content. Glass doesn't need a large field of view. It delivers the content through a prism onto one eye – the reason why it is called Glass and not Glasses. It is really lightweight and comfortable to wear. In addition, Google came up with designer collections so that the device now also works for people who wear glasses for optical correction. At any rate, the practical use for Augmented Reality is limited on account of the performance of the device itself as well as the short battery life. When used in camera mode, the battery will only last about 30 minutes. Google Glass is practical for showing annotations at a real scene. 3D overlays and animations are better for other glasses with a larger field of view. In January 2015, the Google Glass Explorer program was terminated, so the first version of the Glass is no longer available. Google has received a lot of feedback from the beta testers and is now focusing on future versions of Glass.

Image: © www.google.com

EPSON MOVERIO

Epson's Moverio is not as stylish as Google Glass. It is bigger, heavier and doesn't have a solution for optical correction. It comes with a small box containing battery, processor and control unit. One benefit is that the battery is larger and lasts longer. Even with Augmented Reality you can work for an hour or more. Although the content is displayed in both eyes you can still see the environment at the same time. This combination is ideal for Augmented Reality: You see the digital content superimposed onto the real environment. The Moverio is more immersive than Google Glass. It is possible to work with it for up to an hour, then it gets too heavy. Typical use scenarios include providing the user with digital and contextual information for manuals, documentation or navigation. One of the major benefits: Epson Moverio is available for around 700 Euro (or US$700).

Image: © www.epson.com

MICROSOFT HOLOLENS

It was a big surprise when Microsoft unveiled the Hololens. What they showed in their concept video is exactly what is needed for Augmented Reality. The Hololens is bigger than Google Glass and Epson Moverio but seems to be more ergonomic. Due to the full screen in front of your eyes it might be more immersive. What we don't know yet is what is already possible and what is still a concept. However, the important fact is that Microsoft believes in the benefits of Augmented Reality. Microsoft has not yet revealed the exact date when Hololens will become available. More information might follow at the Microsoft Build Conference in early May 2015.

Image: © www.microsoft.com

deem a new device too complex and re-settle for existing systems or devices.
One of the big challenges of developing AR devices is to connect the user with the device and the content without any unnatural elements. Often new user interfaces, controllers and gestures need to be developed. To be intuitive and easy to follow, the gestures in particular need to be inspired by natural gestures that we know from our daily lives or from using familiar devices such as smartphones and tablets.

Where is AR today?

As of 2015, Augmented Reality has already come a long way: the hardware has improved and more devices are entering the market. All big players are working on solutions. Apparently, Apple is also working on an AR device. The improved hardware allows better applications and use cases.
Getting back to the question of tablet versus glasses, it can be said that currently, tablets and smartphones are the best solutions when working with AR. The reasons are superior performance, higher resolution, and better sensors. In addition, many people already have mobile devices and know how to handle them. The glasses – on the other hand – are still heavy, not overly comfortable and often lacking solutions for optical corrections. This year will bring more devices and by the beginning of 2016, the glasses will be used in different areas – perhaps not all day long, but certainly for specific tasks. The future of contextual content – and this is for sure – will be glasses.

SAMSUNG GEAR VR

At first glance, Gear VR appears to be Virtual Reality glasses. It is a completely closed device with a large field of view. The Gear is powered by a Samsung Galaxy Note 4 smartphone. Because you can run Augmented Reality applications with this device, you can easily use them with the Gear VR. It provides a unique experience as you find yourself in a strong immersive environment. This is particularly beneficial for practical use in a simulation or training scenario. An added advantage is that it sits well on your head and you can work safely with it. The Gear VR is available for about 200 Euro (or US$300). There are two versions: one for the Galaxy Note 4 and one for the latest version, the Galaxy S6.

Image: © www.samsung.com

GOOGLE PROJECT TANGO

Last but not least: a tablet device. Google's Project Tango is a special tablet fitted with more sensors. The big difference from existing devices is that it has a depth sensor. This is a camera comparable to Microsoft's Kinect for the Xbox. You can scan your environment in 3D, and the device can then use this information to provide you with contextual information. For instance: When you walk through a supermarket, the device scans the shelves and products, and displays additional information such as special offers. The option of scanning 3D objects in a real environment and using these scans is an important step for Augmented Reality. It is yet uncertain as to when Tango will hit the market. It is already used for NASA projects and other prototypes. Last year Google announced that they are collaborating with the hardware manufacturer LG.

Image: © www.google.com

Content tiering: How much and what should we translate?

With increasing revenue from global markets, companies are faced with the question of what material to make available for international customers. Content tiering – prioritizing information for localization – is one way to meet this challenge.

By Rebecca Ray

Revenue from emerging markets represents sizable chunks of total revenue for many companies nowadays. The nature of documentation is changing as more and more of it is accessed through the cloud and made available via mobile devices. At the same time, localized content volumes continue to grow as higher numbers of languages are delivered at much faster rates than in the past.

These factors lead translation and localization managers to ask the following question: "How do we decide which pieces of content to translate, and how deep should we go?" This article discusses the typical mistakes that translation buyers make when it comes to content prioritization and how to avoid them, the parties with the power to make content tiering happen, and guidelines for developing content-tiering criteria.

Image: © bagi1998 / istockphoto

Localization teams get lost on the road to content prioritization

The common missteps made by buyers of language services as they struggle with large amounts of content in many languages include:

1. Inaction
2. A lack of monitoring and analysis of whether localized content is used
3. An endless search for the perfect solution
4. An inability to make a clear business case for middle management peers and executive teams

Organizations ignore the need for content tiering

Companies continue to try to translate as much as possible and don't even recognize that they have a problem. Or, they give up because they assume content prioritization is too difficult, especially when they include legacy content in the mix. Other organizations apply the same content filter to every market without digging deeper to understand what local customers expect or require. In this case, companies may localize some pieces of content and not others, but they will use the same list for each language and market.

No one tracks or analyzes what content prospects and customers consume

Marketing, product management, compliance, technical documentation, and translation teams require this data for planning and budgeting purposes. Localization teams continue to translate marketing components such as banners, promotional videos, training, print ads, and WebEx meeting summaries into several languages regardless of what local visitors access – or don't access. You may not be able to track all content, but there are several online tools available that help to analyze usage for customer-facing material.

Companies waste time searching for a universal solution

There is no "right" or "one-size-fits-all" response to the content tiering question. That's because organizations must recognize and balance stakeholder expectations when formulating their response for each market in which they do business. Local market preferences – and target audience demographics within those markets – enter into the equation. Some of these expectations may have already been set by local competitors. Content type (for example, marketing versus regulatory versus product information), industry vertical (pharmaceutical versus entertainment), and delivery platform (mobile versus PDF) also help dictate what gets localized and what doesn't.

Localization teams don't always present the most convincing business cases

Language teams continue to allow their middle management colleagues and executives to divert discussion to short-term factors such as cost per word and outsourced translation budgets. More mature teams focus attention on the percentage of total revenue that localized content enables. To bolster their strategic argument, localization managers can show what it costs their companies to create original content versus what they spend to localize it.

Smart translation groups collaborate to achieve content tiering

Content design, creation, delivery, and maintenance are hydra-headed issues that remain beyond the control of any one area or C-level executive. However, there are ways for a localization team to exert more control over this raw material, which is the basis for their work and a critical enabler of overall revenue.

Move upstream to the source of various content types

One way to alleviate bottlenecks and elevated costs at the end of the global content delivery chain is for translation teams to reach out to content creators at the design stage. This means joining forces with colleagues who create the products, services, and programs as well as the content that accompanies them. Some organizations create cross-functional teams to support enterprise-wide initiatives to tier their content for the first time, while others can accomplish their goals through conference calls and a few meetings.

Tune in to pains in other areas of the organization

Localization teams can accomplish more by supporting other functional areas to meet their international commitments. This can take the form of acting as the liaison between corporate and in-country teams to enable them to establish direct channels of communication regarding content design and delivery. Or, it may manifest itself through participating in a corporate-wide initiative to rationalize, reduce, and re-use all content produced by the organization.

Guidelines for developing content-tiering criteria

Once companies decide to prioritize their content, they need to consider it with regard to local market expectations and content type.

Build global customer profiles to customize content tiering

Can your team – and the company's content designers and creators – clearly describe in a sentence or two each customer persona that will use each piece of content and why? If not, there is work to do before starting the tiering process. Do you ignore what people actually download in Russian and Arabic? It may be less than you think. Are Turks under the age of 30 more or less tolerant of English in consumer products? Use Twitter to find out.

Connect business goals with expectations of real prospects and customers

Resist the temptation to take the initial advice of a language service provider (LSP), marketing agency, or in-country staff or partners who push you to increase the volume of localized content. Instead, base your decisions on hard data from web analytics and unfiltered feedback from real prospects and customers. This information will enable you to stay focused on more objective business growth and strategic goals, rather than succumb to the "squeaky-wheel" syndrome.

Analyze content type to further adapt your content-tiering model

After determining global customer profiles and linking them to the appropriate business goals, take a closer look at localized content types. Factors such as world-readiness of the content, the applicability of corporate programs, and whether the company is

determined to deliver the same customer experience worldwide will affect how you set up your tiers. It may make sense to translate more content for more markets if the source is suitable for (post-edited) machine translation. Business development colleagues may temper their demand to translate everything if you offer them different levels of service for various content types.

Table 1 provides one example of how to weight and rank the criteria suggested in this article to get you started on your own content-tiering model. "Weight" determines how important this factor is in the overall analysis, while "Rank" determines the importance of a factor in a particular region.

Take note: You may need to drill down to the level of specific segments within a local market; for example, some Mexican-American customers prefer fully-localized content while others switch back and forth between Spanish and English depending on the topic.

If your company is entering new markets or ramping up support for new languages, content prioritization can provide a base set of content that can be localized to meet local requirements without breaking the budget. For more established markets, content tiering allows your organization to optimize the localized content you deliver to ensure that it really helps to drive revenue – over the short term through enabling more international sales and over the medium term by playing a significant role in retaining happy customers who become brand loyalists.

Content-tiering criteria (sample)

South Korea local market factors (sample)	**Weight**	**Ranking**	**Total Score**	**Comments**
Tolerance for source language	5	4	20	The higher the ranking, the lower the tolerance for the source language.
Tolerance for subpar translation quality	5	3	15	Local market will accept inferior quality in order to receive localized content sooner. The higher the ranking, the lower the tolerance for subpar translation quality.
Government regulations	4	5	20	Regulatory compliance requirements may be weaker than we assume.
Strategic importance of this market	4	1	4	South Korea is not strategic for us at this point, but we have received a high level of requests recently for localized content.
Localization expectations set by other competitors	5	3	15	Competition may force us to localize regardless of other criteria.
Subtotal for local market factors			*74*	
Content type factors (sample)				
Customer-facing product content	5	5	25	Choose the top five pieces.
eCommerce components	3	1	3	We need to decide if we will sell directly in South Korea.
Marketing programs	2	1	2	We may allow our local partner to create and execute all programs.
Customer testimonials	5	5	25	These will carry a lot of weight, even though the first ones will not be from South Koreans.
Subtotal for content type factors			55	
Total for local market and content type factors			**129**	**Tier one requires 180 points or more; tier two requires a minimum of 150 points; tier three requires at least 120 points.**

Table 1: Example of content tiering based on local market and content type factors
Source: Common Sense Advisory, Inc.

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Integrating a translation memory into a CCMS

Translate once, use everywhere. This – in a nutshell – is the idea of an integrated translation memory, which can save companies a lot of time and money. So how exactly does it work?

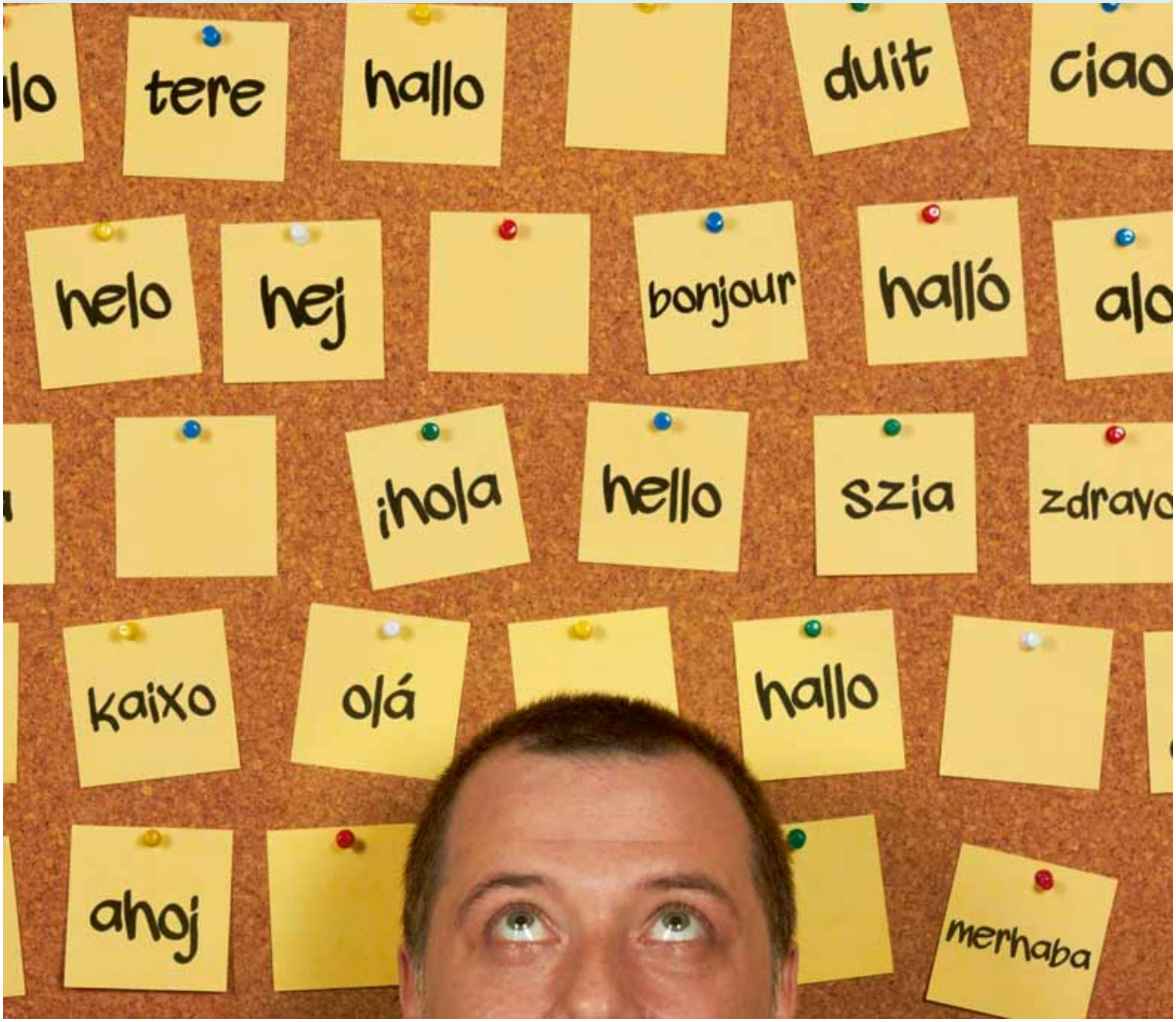


Image: © atakan/ istockphoto.com

By Joakim Ström

The technology we use for technical communication has come a long way since the early days of desktop publishing tools. Today, we benefit greatly from the vast possibilities made available to us via XML production environments, topic-based authoring, single sourcing, multi-channel publishing, and cool new ways to publish on the Web and integrate documentation into our products.

When it comes to translation, we rely on translation memories. They are quite efficient, allowing translators to easily find and re-use previous translations. The process of translation itself, however, is costly and time-consuming. Machine translation is getting better, but is still far from good enough. Every reduction achieved in translation volume translates to reduced costs and faster time to market. This fact motivated me and my colleagues to test out a different way of getting the job done. We wanted to find out what would happen if we integrated a translation memory into a component content management system (CCMS)? We discovered that this technique saves money, optimizes the translation process, and improves the quality of the translations themselves.

Waste detectives – on a mission to cut costs

When we first set out to integrate a translation memory into our CCMS, we had our minds firmly fixed on cost reduction. We knew that our customers were spending a lot of money and resources on translating technical documentation. It seemed obvious to us that the key to cutting costs would be to eliminate waste – and we suspected that the traditional, file-based translation process was riddled with it. We were right. This is what we discovered:

- **The same, unchanged content is being translated over and over again,** simply because it happens to be located inside a file where other content has been altered. When a new version of an existing source file is created, the entire file is often re-translated, even if only one word has changed.
- **Irrelevant content is being translated.** In a file-based translation process, where a source file is filtered using conditions, and a certain configuration needs to be localized, the entire topic – including all filtered content – is being translated. Not only are translators spending time on content that has already been translated, they're spending time translating content that's not even going to be used in the publication.
- **Entire files are being re-translated because of structural changes irrelevant to the text.** Even if the only difference in a new file version is the order of the sections, or that one paragraph has been removed, the entire topic is still being re-translated.
- **Text is being re-translated because of a change in a non-translatable element.** Common examples are dates, numbers, and names. However, dates do not require translation if they are managed using local-based formatting when the publication is compiled.

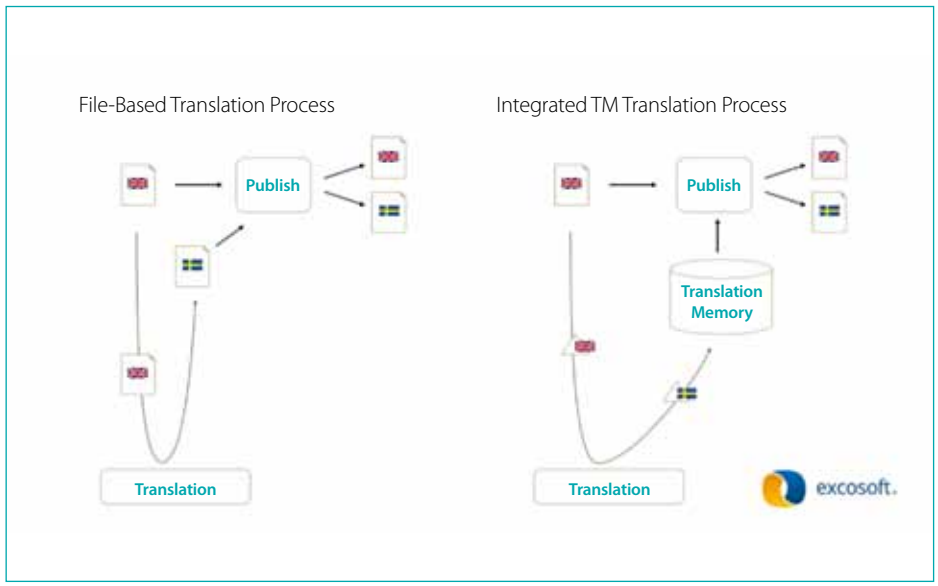
Once we had identified key sources of waste in the file-based translation process, we set out to build our solution. We made a lot of mistakes in the beginning, and developing the functions took us much longer than expected. But when the dust finally settled, we had the tools to eliminate a lot of the waste we had discovered – and thus were able to save our customers a lot of money on translation costs.

How does an integrated translation memory work?

If integrated translation memory had a motto, it would be: ***Translate once, use everywhere.*** What this really means is abandoning the file-based translation workflow and ending the wasteful practice of sending entire files or topics to translators. Instead, the integrated translation memory automatically splits up topics into smaller translatable chunks – usually paragraphs. Each paragraph is self-sufficient, and can be translated independently. Thus, paragraphs are translated instead of topics.

The translated paragraphs can then be re-used whenever they reappear in documentation, rather than getting re-translated unnecessarily. Only the ***delta*** – the new and modified paragraphs – are translated. Whenever a translated document needs to be published in any language, the CCMS automatically retrieves the correct translation of each paragraph from the translation memory.

What's also worth mentioning is a promising new technique for maximizing translation re-use, which we call ***generalization***. Generalization takes a more specific block and converts it into a parameterized general block. A product name, number, date or other non-translatable part of a given



paragraph is managed as a parameter, which can vary depending on the context of the block. The translator only needs to know that a date exists in the text, not what date it is. And yes, numbers and dates can look different in different languages. But these are rule-based differences. The CCMS can easily generate localized dates for each published language.

A streamlined translation process

In our quest to cut translation costs for our customers, we discovered that an integrated translation memory also brings greater efficiency to the overall translation process – in terms of both workflow and project management:

Increased workflow flexibility. Since the translation memory resides in the CCMS, and is applied automatically before the translation order is sent, there are no problems with different translators using different translation memories or memory versions. This means that different translation companies can seamlessly take on multiple translation orders, and internal translators can even translate directly in the CCMS – everyone using the same translation memory.

Corrections of translations can also be made directly in the memory and will automatically affect both the memory and all translated documents. It is also possible to let different writers use different languages, even within the same document. In fact, in a distributed project, each contributor can use the language most natural to him or her. The translation memory ensures that all text is translated from all source languages into all target languages.

Predictability. Since the integrated translation memory empowers the CCMS to analyze translation projects and pick out exactly which blocks need to be translated into each target language, it is no longer necessary to request a quote from a translation agency in order to understand the actual volume of work that needs to be performed. The information owner can immediately see exactly how many blocks of content require translation and, in this way, translation costs and delivery times become predictable in a completely new way.

Progress tracking. Another process improvement is the ability to track the progress of a translation in detail. As translated paragraphs are received from the translator, the project manager can easily see exactly how much has been completed, and how much is left to be done. Of course, this also depends on the level of integration with the systems used by the translation agency.

On-the-fly publishing. It is not uncommon that a change does not really require any translation at all. This happens, for instance, when content is simply rearranged or removed, when images are replaced, or when existing content is re-used in new ways. In such cases, the translation memory will report that nothing needs to be translated. It is then possible to immediately publish the document in the target language with the click of a few buttons. The positive impact on time to market is quite drastic in these instances.

Simplified review. As each paragraph is self-sufficient and translated in isolation, it only needs to be reviewed once. Review once, use everywhere. And, translation reviews can begin even before all of the translations are complete – saving money, and reducing time to market.

Elimination of "translation creep". Translation creep is when new changes appear in the translation, that are not motivated by any changes in the source document. Since the translator only gets to see the paragraphs that are changed in the source language, translation creep can never happen. This is really important for companies who have rigid traceability requirements.

Greater consistency = higher quality translations

While Google and other machine translation providers may try hard to change this, high-quality translations still require human translators. Of course – like every human – these translators sometimes make mistakes. We can't prevent bad translations, but we can enforce consistency. DTDs such as DITA make content structure consistent, style sheets make layout consistent, term databases make terminology consistent. And, an integrated translation memory makes translations more consistent.

One common mistake is that the same content is translated in different ways; or conversely, that different source texts become identical when they are translated. We call this ambiguity. Very often, an instance of *ambiguity* indicates some textual problem.

If two blocks of text read the same in Spanish but not in English, this can mean one of three things:

1. The blocks share the same meaning and should be the same in English too.
2. The blocks have different meanings and should not be the same in Spanish.
3. The similarity in Spanish is due to a real textual ambiguity. This case is not very common, and when it does happen the blocks are supplied together with a special markup, which distinguishes between the meanings. This is what we call ***translation hints.***

By analyzing a translation memory, we can identify all these ambiguities. And by systematically weeding out ambiguity from the documentation, the quality of the source content and the translations can both be improved considerably.

Paragraphs or topics?

Some might argue that it is possible to achieve all, or many, of the benefits I have mentioned without the help of an integrated translation memory. In theory, why not make a separate topic out of each paragraph? This way translation would be re-used on the paragraph level just as well. However, this is a recipe for failure.

A topic should be readable and make sense. Its purpose is completely different from a paragraph, which is semantically self-sufficient but does not necessarily convey any meaningful information by itself. If we mix up these concepts, we end up with an unmanageable soup of topics that are meaningless by themselves.
If a topic doesn't make sense for the reader, it doesn't make sense for the writer either. And, it's very hard to maintain a topic that you can't easily follow. Using DITA content references (conrefs) for the same purpose doesn't help much either. Topics and conrefs are good tools for re-using information, not text – and, ultimately, this may be what this all boils down to.
By uniting a translation memory with a CCMS, we can make translation more efficient without affecting the content structure. It's been my aim to demonstrate how, with the help of a translation memory, we can save money, improve translation quality, and make the entire translation process faster and smoother. When this is taken care of, we don't have to think about translation when we organize our topics. We don't have to create spaghetti topics with conrefs everywhere just for the sake of re-using translations. We don't have to produce a ravioli soup of tiny topics just for the sake of re-using translations. Instead, we can let topics be what they should be: bits of collected knowledge, each contributing to the value of the organization that owns them.

contact

Joakim Ström has dedicated over 15 years to software development and innovation in the field of technical documentation. He is one of the key drivers of product innovation and internal improvements at the Swedish technical documentation company Excosoft, where he currently acts as CTO. Joakim has shared his technical expertise and insights speaking at various seminars arranged by SIRNET, documentINFO, Swedish W3C, and recently at the tcworld conference.

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Localizing TV apps

They're built in the same coding language and for the same operating system – but localize a TV app the same way you do a mobile app and your message may literally be lost in translation. Here are the major implications to consider.

Image: © amazon.com

By Terena Bell

Quality

Sometimes quality is a much more important factor than others. Here's why quality is even more important for Fire TV apps than for mobile apps: Fire TV does not have an app menu. This means there is no place to collect notifications. So unlike on a phone, where users can skim over notifications and save them to read or refer to later, TV users will only see your message once. This means it needs to be translated well enough to drive them to action right then and there. You may even want to consider transcreation – a special marketing translation process charged by the hour or project as opposed to the word. Rarely or never done for mobile apps, transcreation focuses as much – or even more – on delivering the emotional tenor and implication of your message as on the message itself.

Using English

Ironically enough, part of your translated app will need to remain in English. This is because Fire TV has a remote that's only available in English. Even though not all users will own a remote (it's an additional purchase), Amazon will not put your app in the Fire TV store unless your app works with the remote. So your translated app might be viewed in one language while potentially navigated through the remote in another.

What winds up happening as a result will be pretty similar to what happened with AutoCAD and Microsoft's communities when their software started being used in a country or by a language group before localization. Users made up their own words for the terms – most often misshaped versions of the English originals. While it might have been easy for users to use the Portuguese word for "to save," since the word didn't match what Brazilian users saw on the screen, they made up a new verb, "savar," and used it instead. So predict your community's needs and embrace the English-only remote.

Integrating select English-language commands into your user interface (UI) will prevent linguistic confusion in your community and help you integrate correct terminology into your processes from the get-go. The alternative would be to

be forced to change your translations and materials later – and at a cost – to use the words your community created without you.

Colors

Different colors have different meanings in different cultures. In the United States, red is associated with hunger or love; in Asia, it can be a color of mourning. When it comes to color, televisions have a much wider range of display quality than mobile phones do. Due to the way televisions render color, what looks red on one screen can appear purple on another. So, even if you took a hard look at your graphics before localization, look at them harder. Think about what the next colors up and down the spectrum are from the ones you use and make sure there's no meaning that could be misconstrued by using them, because someone with a cheaper, lower-grade TV set might see other colors than you.

Creating consistency through translation memories

Translation memory systems help professional translators remember which words have been used. We do this to lower the price of translation (words repeated in the same context usually cost less) and also to improve consistency for the user. For example, say you have an interior design app. You would want to use the word "sofa" consistently throughout instead of calling it "sofa" sometimes and "couch" another time.

Using a translation memory system to localize TV apps is a bit trickier. This is due to the nature of television. Unlike in the past, when people simply sat down to watch TV and do nothing else, 84 percent of modern-day TV watchers use their TV while simultaneously using another device on a regular basis. Sociologists call it *second screen.* And many second screen users are using the second screen to add to the experience of the first – looking up prior game scores, tweeting about what happened on a show or finding out which other movie that actor was in.

What this means is that your translator not only has to integrate consistent vocabulary for a single project or even for you as a client, but that your translation must be consistent across the entire experience. This is especially important for those in e-commerce. Say your app helps viewers find the clothing actors are wearing and directs them to the stores that advertise with you and sell the product. If your app calls a piece of clothing a "scarf", the user will search for "scarf" when visiting your advertiser's website. But if your advertiser has the item listed as a "wrap" or a "pashima", the inconsistency might prevent the purchase. Inconsistent translation has just made it harder for the user to buy, and this translates to lower advertising dollars and lower user engagement for you.

Therefore, translation memory systems for Fire TV apps – more than anything else you might have translated – must be participatory and collaborative, as a myriad of words could describe the product your app is selling.

Writing direction

If you're translating into Spanish, French or other Roman-character languages that read from left to right, you're golden! I have no more tips for you! But if you're translating into a language that reads from right to left, like Arabic or Hebrew, let's talk joystick. Like the remote, the Fire TV joystick is a supplemental piece of hardware that your app must accommodate for Amazon store inclusion. Especially important to know if you design game apps, the joystick is calibrated for a left-to-right reading system. To advance to the next screen, you move the joystick to the right-hand side. Reversing this requires the user to recalibrate his or her own joystick, which – let's face it – probably isn't going to happen. So you need to code for it and be aware of it, possibly placing extra text in your UI explaining which direction users need to go. This is not translation, but part of localization – something extra and explanatory will need to be added to make your app local and usable for this audience.

A second note about direction for those localizing for a Japanese audience: A television is not a telephone. Sounds logical, but because Fire OS is so similar to Droid, it's easy for a mobile app developer to think the app won't require a lot of tweaks to work for Fire Phone and Fire TV. Your typical Droid screen has a 4x3 aspect ratio; both a laptop and an iPad have a 124x768 aspect ratio. But television screens are much wider: 16x9. What this means for localization is that televisions are designed for landscape view only. Remember, though, that sometimes Japanese reads vertically!

Enter internationalization. This cannot be fixed by your typical translator or localizer, but must be fixed in your app's source code. While internationalization – a special process for repairing or replacing code so software can be more readily localized – can fix your app to allow up-to-down text display within the app itself, be aware that the title of your app must read left to right in the Amazon store from a marketing standpoint. In addition, Fire OS does not support up-to-down display for your title or menu information.

Display

All text used in Fire TV apps must be readable ten feet away from the television. For languages like Traditional Chinese, where a minute dash or dot can completely change the character's meaning, this means you must plan for the font in your design to be huge. You may need to shorten what you say and leave things out to keep users from having a screen completely filled with text or from having to scroll through too many pages before being able to use your app.

All in all, Fire TV is a great opportunity to reach new audiences, no matter what language you're working in. And with the recent product launch in the UK and Germany, TV app localization won't be that far behind. Thinking about these aspects during designing will make it easier to localize your app later. On average, mobile apps see 128 percent more downloads in just one week after translation. As Fire TV's market grows, TV app localization numbers won't be far behind.

contact

Terena Bell recently sold In Every Language to Paragon Language Services and is currently their Vice President of Marketing. She served as Secretary of the Board for the Globalization and Localization Association (GALA) and on the Association of Language Companies (ALC) leadership council. She currently sits on the Obama Administration's White House Business Roundtable and writes the popular column "Micro/Macro" for MultiLingual Magazine.

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Creating effective presentations for a global audience

Who wouldn't enjoy a joke at the beginning of a presentation to ease you into the topic – however complex it might be? Well, there are actually a few cultures that would prefer to stick to facts and figures. So, how can you adjust your presentation to appeal to an international audience?

Image: © kasto / 123rf.com

By Elena Groznaya

The speaker is moving to yet another densely-packed presentation slide. At this point, it seems that your biggest challenge is to keep your mind focused or at least your eyes opened. Sounds familiar? Another common scenario is a speaker, who starts off with a few strong statements, then rushes through a brightly colored slide set, and finishes with another strong statement leaving you wondering what point he or she was trying to make.

And, the situation is even worse when you find ***yourself*** in the speaker's shoes. Imagine going through your powerful presentation just to find puzzled looks on the faces of your audience? If you know the feeling, then you have probably already faced the challenge of presenting to a global audience.

Despite the fact that multiple – often very complex – issues of doing business around the globe are gaining attention in practice-oriented and academic literature, there is an underestimated aspect of global business that deserves more consideration: the way we present information, how we convey our thoughts and make other people understand our ideas and intentions.

Applying general presentation best practices

Practically every person involved in cross-national business will eventually face the challenge of sharing information with an audience that dramatically differs from the one at home. The most common approach is derived from the assumption that our target audience abroad possesses and applies the same principles of dealing with information as our home audience: if the presentation worked well at home, it will work well anywhere else. This is exactly where major problems start.

General best practices for creating a clear, effective and convincing presentation are well known. The most crucial point is to tailor the content to the expectations of your audience. The importance of this customization seems to be so obvious at home, yet is often neglected in an international setting. This underestimation of cultural differences can lead to a great deal of frustration, wasted time and higher costs.

Basically, each step of a successful presentation has to be thoroughly planned. An experienced speaker will think through every detail of his talk, starting from the first impression right through to the ending with a powerful conclusion. This strategy works well as long as the presenter is dealing with a familiar audience. However, things can go seriously wrong when presenting to people from a different cultural background, with a diverse set of values and differing expectations.

Culture-specific expectations

For a US speaker, it is a tradition to start a presentation with a joke. It helps the audience relax and creates a friendly, informal atmosphere that is a crucial element for an open, direct discussion. Can anything be wrong with that? – Yes, it can, if you are presenting, for example, in Japan or to a highly task-oriented German audience, who might perceive the lack of formality as a lack of professionalism and reliability. These audiences might find the easygoing approach to be inappropriate for a business situation and would generally prefer to stick to a formal, strictly task-oriented style. They might even find it difficult to take the ideas of a non-serious person seriously. Besides, translating humor is a big challenge in international communication. A good joke that always works at home might easily miss the target abroad, be misinterpreted or even backfire.

Probably the most crucial issue to getting the message across is the logic of a presentation. For instance, many European cultures prefer to stick to facts: They calculate and analyze all possible risks, and often present a very detailed picture. A good presentation here normally starts with short background information, then gradually and logically moves through relevant facts and data, and eventually ends with main points, suggestions and conclusions. People in the US, on the other hand, who value their time and don't mind a certain degree of risk, would find this long, data-heavy sequence style rather wearisome. In most cases, a powerful presentation in the US is expected to start with the major statement and the solution, followed by rationales. A presenter usually avoids an overuse of facts and figures. If additional clarification is required, it can be obtained during the Q&A session after the presentation. Then again, this approach might be perceived as too straightforward by an Asian audience that expects the speaker to follow a chronological order, covering origin and a brief history of the company, project or product with an emphasis on solid background facts and technical data.

Designing global presentation slides

The influence of how information is perceived within a culture must also be considered when designing presentation slides. Research shows that the way a presenter builds his or her slides varies dramatically among cultures. The requirements for the inherent logic and content of each slide are as important as the logic of the presentation itself. Bullet points, detailed graphs and data tables will be of great help in Europe. An Asian audience might feel very comfortable with a lot of text on each slide. In addition, story-loving Asian listeners will expect each and every slide to include a systematically arranged, informative, well-supported, independent narrative with an introduction, a body of facts and a clear conclusion.

In South and North America, where the audience is flexible and more open to a certain degree of uncertainty, images, an intuitive, inductive atmosphere as well as short and clear messages that leave a good deal of room for interpretation and make the audience ask for more, will do a much better job.

Q&A sessions, feedback and open discussions

Another aspect that makes the whole procedure even more complex is the desire (or the lack thereof) of the presenter to involve the au-

dience and to receive direct feedback or questions during or at the end of the presentation. Most English-speaking and European cultures believe that Q&A sessions as well as successive discussions are natural components of any presentation. A presenter from these cultures will schedule time for this procedure, anticipate forthcoming arguments and often build the presentation in a way that induces certain questions from the audience. Both questions and feedback can be very direct in these parts of the world.

An enthusiastic Western speaker, however, might feel pretty awkward when facing a very quiet, or even worse, seemingly sleeping audience in some Asian countries. In this situation, the silence can be misinterpreted as a lack of interest and a pretty bad sign in general, which might dramatically decrease the speaker's enthusiasm. The face-saving, relations- and group-oriented Asian cultures, however, would find open discussions, expressions of strong individual opinions and straightforward feedback to be overly direct, too insensitive and even offensive.

In these restrained cultures silence is a sign of concentration. Closed eyes do not always imply that your talk made your audience drift off into slumberland. Asian listeners are used to mono-tasking and to control their emotions. They might find that the only way to minimize unnecessary distractions from the over-active mimic or body language of an energetic and enthusiastic North or South American speaker, combined with the necessity of comprehending information in a foreign language, is to literally keep their eyes closed. Feedback would mostly be offered in a non-direct way, often long after the actual presentation, in a face-to-face individual conversation.

Another extreme is constant interruptions that can be found in multitasking South American, South Asian and Arabian countries. For a person who is used to a linear, well-planned and systematic approach to presenting ideas, it might be a challenge to stay calm when the doors are constantly opened and shut, calls received, remarks exchanged, snacks offered, etc. These relations-oriented, multitasking cultures expect a certain degree of flexibility and patience. The Q&A session might take place directly after the presentation or, more commonly, is shifted to a less formal venue, where all the details and doubts can be discussed personally without the danger of offending or challenging a speaker publicly. This attitude might in turn be quite discouraging for a speaker constrained by a strict schedule from the direct, business and time-oriented cultures of Northern Europe or North America.

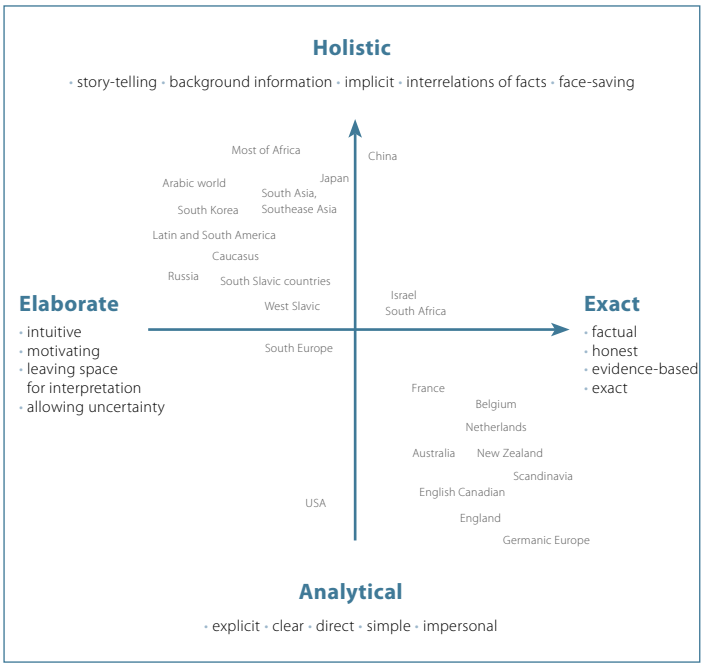
Tips for approaching an international audience

It is generally a challenge to stay calm and keep a positive attitude when expectations are not met, and when the target audience does not quite react to your well-planned, powerful talk the way you had envisioned or hoped for. The only way to avoid such a frustrating outcome, wasted time as well as unnecessary expenses is to strictly follow the rule of tailoring your talk to your listeners.

So, how do you achieve the goal of bringing your ideas to people from another cultural background?

First, customize.

It is crucial to remember that a great variety of cultures also implies a great variety of dealing with information, of learning, analyzing, and presenting. This is why any idea has to be delivered in an empathic manner. It is advisable



Source: Elena Groznaya

to step out of your own world and try to think the way your audience does, to see the world through their eyes, and try to re-create their system and hierarchy of values. This strategy might sound more complex than it is. Do some research on your target culture, its worldview, value system, behavioral norms, ways of learning and understanding.

Second, stay natural

If you like engaging your audience and prefer to share your ideas in a friendly and open manner, supported by powerful images, try to combine your style with the strict logic, data-intense, story-telling approach that is preferred by your reserved, fact-oriented listeners. In your slides, combine intuitive images with solid data, context, evidence and clear conclusions. If you insist on adding humor, test your jokes on a native person or, better yet, a few representatives of the host culture, before you include them in your talk. If you belong to a more reserved culture and are more accustomed to a structured, data-intense style, you could touch up your talk by shifting most of the data to the end of the presentation. Try adding a few professional pictures and restructure your presentation based on the logic of your host culture. Also, try to engage your audience by asking questions rather than offering answers during your talk.

Third, prepare handouts.

In many cases, it is wise to prepare detailed, informative, data-based handouts and distribute them before your talk. This also helps when you and your listeners are either divided by a language barrier and you have to rely on the help of an interpreter, or when your audience might find it difficult to understand you. When you are planning your talk in a very structured, data-oriented country, it usually makes sense to send your presentation and handouts in advance, so that your audience has time to get to know your ideas and prepare questions.

Fourth, consult with representatives of the host country

Probably the most effective way to customize your presentation is to ask a person or a number of people from your target culture to check your presentation and suggest questions that might arise. It might take a few tweaks before your presentation is properly tailored to your host culture. But this is definitely worth it.

As Mark Twain once said, "It usually takes me more than three weeks to prepare a good impromptu speech." Double this time when preparing a presentation for a foreign audience, customize your talk based on the target culture, ask for assistance, and be flexible and ready for surprises. These four simple points plus some experience will help you to deliver powerful and effective presentations in a globalized world.

contact

Elena Groznaya is a researcher, trainer and consultant, specializing on the impact of national cultures on international business, and on the mechanisms of dealing effectively with the global diversity on the organizational and inter-organizational levels. She has broad experience living and working in a number of countries in Europe and Asia.

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tcworld conference China

tcworld China conference 2015 makes a successful debut

By Corinna Melville

Around 70 participants gathered for the first-ever tcworld China conference, which was held in Shanghai on March 17, 2015. The event was organized by tcworld GmbH in collaboration with the China Association for Standardization (CAS).

Presentations focused on the state of the art of technical communication in China and internationally as well as on core competencies and skills for technical communicators and product safety. Presenters from Germany, Sweden, the US and the Netherlands shared their knowledge and expertise.

Participants came from local, national and international businesses in China including Bosch, Sony Ericsson, Huawei, SDL and Sony. Etteplan, Semcon, Tweddle and Adobe sponsored the event.

tcworld China was greeted with great approval: "It provided me with a new perspective on technical writing," remarked one visitor. "An excellent chance for technical writers in China to unite," said another.

tcworld conferenceIndia

Putting the spotlight on Indian technical writers and translators

tcworld India 2015 has continued its successful path with the 5th international conference held in Bangalore from March 12–13, 2015. More than 300 participants took the opportunity to learn from an impressive line-up of internationally renowned speakers.

By Corinna Melville

The event was organized by tekom Deutschland e.V. in collaboration with the Technical Writers of India (TWIN). Topics ranged from core skills for technical communicators and industry-specific challenges to working in a multinational environment and creating content in various languages and for multiple markets.

"For the first time in the history of any Indian technical writing conference, we witnessed presenters from Korea and the Czech Republic, and participants from Poland and Italy", said Akash Dubey, TWIN Community Head. The hands-on workshops strongly emphasized the conference's interactive nature and offered real ROI to attendees. Among other tracks, the tools track offered participants practical knowledge. "There is a sea of technology and tools to be learned and used. tcworld India 2015 has inspired me to learn and to further my career," commented one participant. Organizers and participants alike once again praised the translation track – running alongside the numerous lectures on technical communication.

"tcworld India has done something that has never happened on this scale and with such international participation before: it has brought the long overdue spotlight to the Indian translator and to the Indian translation industry," remarked Jayaraj Samuel, who has extensive experience in the Indian translation industry and helped to organize the track.

"The translation industry is still in its infancy in India and will require some encouragement and international support to realize its potential."

This year, the encouragement and support came from many places: Presenters, sponsors and visitors from Bangalore, Pune, Chennai, but also from Israel, South Korea, Germany, Italy and the US – to name just a few – made the conference a truly international event.

Preconference workshops were available on the Internet as real-time streams. Day one kicked off with an opening ceremony, which was presented by tekom's CEO Dr. Michael Fritz, TWIN's founder Akash Dubey, and program manager Sandhya Ranganathan.

Tom Johnson, creator of the blog *I'd Rather Be Writing,* gave an insight into Innovation in Technical Communication in his keynote speech.

Highlights of the second day included the translation track as well as hands-on workshops by international experts, a debate on content ownership, and strategic panel discussions with technical communication and localization leaders.

The huge success of the event and the enthusiasm of participants and sponsors call for the return of tcworld India in 2016. "We've already received enquiries from sponsors for next year's event," says Christine Keller, international program manager at tekom. "With the high demand for further networking and learning opportunities, we are even thinking of expanding the program in 2016."

tcworld calendar 2015

when	what	where
April 27 – 29	**Riga Summit 2015** www.rigasummit2015.eu	Riga, Latvia
May 11 – 13	**EAMT 2015** www.eamt2015.org	Antalya, Turkey
June 3 – 5	**Localization World Berlin** http://locworld.com	Berlin, Germany
June 3 – 4	**Information Energy** http://informationenergy.org/2015 ①	Utrecht, the Netherlands
June 4 – 5	**UA Europe 2015** www.uaconference.eu	Southampton, UK
June 21 – 24	**Technical Communication Summit 2015** summit.stc.org	Columbus, OH, US
Sep 8 – 11	**Content Marketing World** www.contentmarketingworld.com	Cleveland, OH, US
Sep 15 – 29	**tekom Europe Roadshow** http://conferences.tekom.de/tekom-europe-roadshow-2015/tekom-europe-roadshow-2015/ ②	Copenhagen, Zurich, Linz, Bologna, Bucharest
Sep 30 – Oct 2	**Information Development World** www.etouches.com/ehome/113382	San Jose, CA, US
Nov 10 – 12	**tcworld conference 2015** conferences.tekom.de	Stuttgart, Germany
Nov 8 – 10, 2016	**tcworld conference 2016** conferences.tekom.de	Stuttgart, Germany

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Information Energy is the annual meeting place for Smart Information professionals. It brings together enterprise information, big data, service design, content marketing, educational publishing, techdoc and structured content, and shows that user experience is driving new developments. Smart Information is when disciplines and sectors integrate. When gaming principles are applied for educational content, when technical documentation is used for marketing, when information is in things, when big data is used for learning, when the content itself becomes an asset: content is a service!

At Information Energy we don't break down silos, we merge silos.

Visitors of Information Energy are entitled to speak and pitch in the Infomedian Arena. Just stand up and make your speech! But note: this is only for registered visitors – so register now!

②

tekom Europe is once again organizing the successful **tekom Europe Roadshow,** a special one-day conference on technical communication that will be held in five different locations throughout Europe: Copenhagen (Sep. 15), Zurich (Sep. 17), Linz (Sep. 22), Bologna (Sep. 24), and Bucharest (Sep. 29).

The roadshow seeks to spread information and knowledge on the latest industry trends and offers participants a unique opportunity to expand their knowledge and exchange ideas regarding technical communication standards and processes. The main topic of this year's Roadshow is "Intelligent Information".

The roadshow is targeted at decision-makers and professionals in the field of technical communication who are eager to learn and share their knowledge about the latest industry trends. The organizers expect attendees from a large spectrum of professional backgrounds ranging from technical writers, information designers, technical documentation managers to content architects, and many more.

See page 8 for more information.