

Image creation and management: a task for technical writers?

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Technical writing is a quite recent profession. According to the Society for Technical Communication (STC), it emerged in the US during World War II. It took time before the boundaries of the profession were defined. First companies had to face the fact that they needed technicals writers to do the job that was once done by Subject Matter Expert. The profession has evolved and the documentations rules and aspects have changed. Images became an integral part of technical documentations, making them more accessible and easier to understand. The question raised in the present article is whether it is the technical writers' task to create and manage images or if the task has to be endorsed by a specialist in illustration. Opinions differ. It seems that there is a gap between those who have been exercising the profession for decades and those who are new in the field.

Keywords: image creation, image management, technical writing, technical writer's tasks, technical writer's education.

Introduction

The subject of this research came from our personal experience. As technical writer apprentices, we daily interact with manuals in both numeric and paper formats. We noticed that the quality of the images in those manuals was poor. For instance, screenshots were blurry and hard to read, photographs were too small while icons were too big, hotspots were not at the right places.

The quality of the images impacts the quality of a documentation itself. Images are the first thing that readers see when they look at any type of document. If what they first see is not of good quality, there is a good chance that the value and the liability of the support they are consulting will be questioned. So the poor quality of the images in the manuals we were working on appear to us as a major issue.

Images are not ornaments. When accompanying text contents, they add additional informations and are sometimes essential to understand the text. Images can also act as self-sufficient and straightforward pieces of information.

Images constitute a useful tool for technical writers whose aim is to communicate information in the most efficient way. But whose responsibility is it to ensure that the images used in technical documentations are appropriate and of good quality? Are the creation and management of images a task for technical writers?

Methodology

As the issues we noticed came from the images in the manuals of the services we were working in, we first started by carrying out investigations in our own services, interviewing our colleagues.

Then, we wanted to know if the conclusions we came to were applicable to other technical writing services in other companies, so we launched a survey in the form of a questionnaire that we shared online. The goal of this first survey was to know how technical writers deal with images. Do they have an established guide concerning images management and creation? Do they have a system dedicated to the creation and the management of their images?

Our teacher in illustrations had the project to create a photo library. As we were interested in participating in this project, we also took interest in image metadata with the plan to devote a large part of our research to this aspect. As a result, we included questions about images metadata, sorting and indexing in our first survey.

Our university organized a seminar on technical writing. This allowed us to present our project and to meet technical writers that were interested in the subject. They gave us their opinion about it.

Then, we decided that, rather than basing our research on how technical writers manage and create images, we would take another path and base it on the following question: are images creation and management a task for technical writers?

Several reasons led us to change our rifle of shoulder. The first reason is the result of the investigations we carried out in our services and the result of the first survey we conducted. Then, our teacher's project was delayed. We couldn't take it as part of our research anymore. We also realized that the scope of our project needed to be more precise. We gave up the idea of making our search on image metadata a central aspect of our project. Still, we planned to use what we found on the subject to enrich our research.

We conducted a second survey with the main aim of understanding how technical writers perceive images. In that survey, we straightly asked the participants whether they think that image creation and management is one of the responsibilities of a technical writer.

In addition to those surveys, we looked for articles on the Internet that discuss the subject we were treating. We also asked our technical writing teacher for a phone interview based on the question "Are images creation and management a task for technical writers?". As a senior technical writer who worked 30 years in the field we considered that is point of view on our problematic would be interesting. We finally asked the opinion of an expert in digital asset management and metadata about technical writing and image management.

We combined the different results we obtained to make sure that our research article would be as representative as possible of the approach we followed.

Results

Results of the investigations conducted in our services

The first fact we noticed in our services was the lack of graphic standards specified by the company or the lack of knowledge and respect of the graphic standards defined. For instance, we could notice filenames and resolutions were not respected while there were explicit rules about both. Another example was the presence of text in JPEG or PNG images while the rule was to use SVG only, if text couldn't be avoided in an image.

The second fact was the lack of a specific method to create images. Indeed, we asked several technical writers how they created a specific image, and we noticed each of them was using a different software and a different method to accomplish this task. For instance, a technical writer was using two software, depending on the format (JPEG, PNG, SVG...) of image wanted while another technical writer was using two other software, depending on the type of image (screenshot, diagram, photo...).

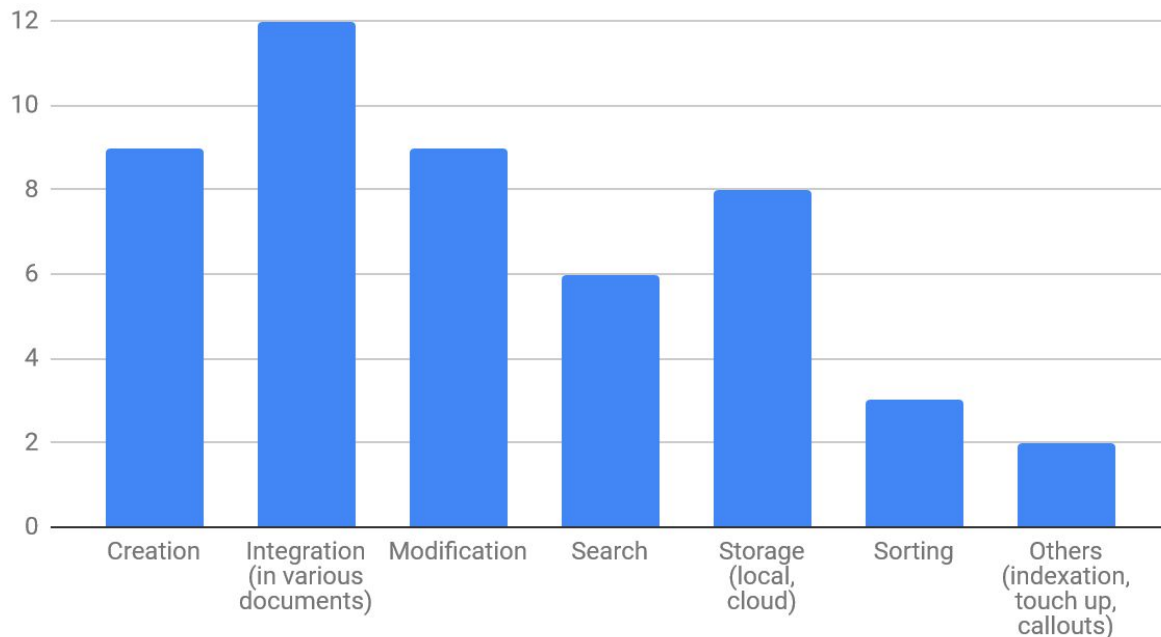
The third fact was the lack of a dedicated library to store and manage images. For instance, if we wanted to look for a specific image, we first had to know in which manual this image was. Then we had to open the source folder where this manual was. The image was in a subfolder of this source folder. There was no way to know who created the image or which person was the last one who modified it.

Finally, we noticed that, sometimes, the issue came from the channel through which the images passed, before being integrated into the documentation. There were several intervenants in the creation and management of images before they were finally integrated into the documentation which was another source of mistakes. In some services, access to materials for which writers conceive documentation was restricted. Technical writers couldn't manipulate those materials or even enter the room where they were. Photos were taken by those who could approach the materials (logistic support analysts or engineers for instance). Those people were not aware of the rules that define the creation of images. Those photos were then transmitted to the technical writers through models (without the source photos), created most of the time with Word. Yet, the quality of an image put in a Word document was altered. Those photos were supposed to be optimized by an illustrator but for costs reasons they were not.

Results of the questionnaires

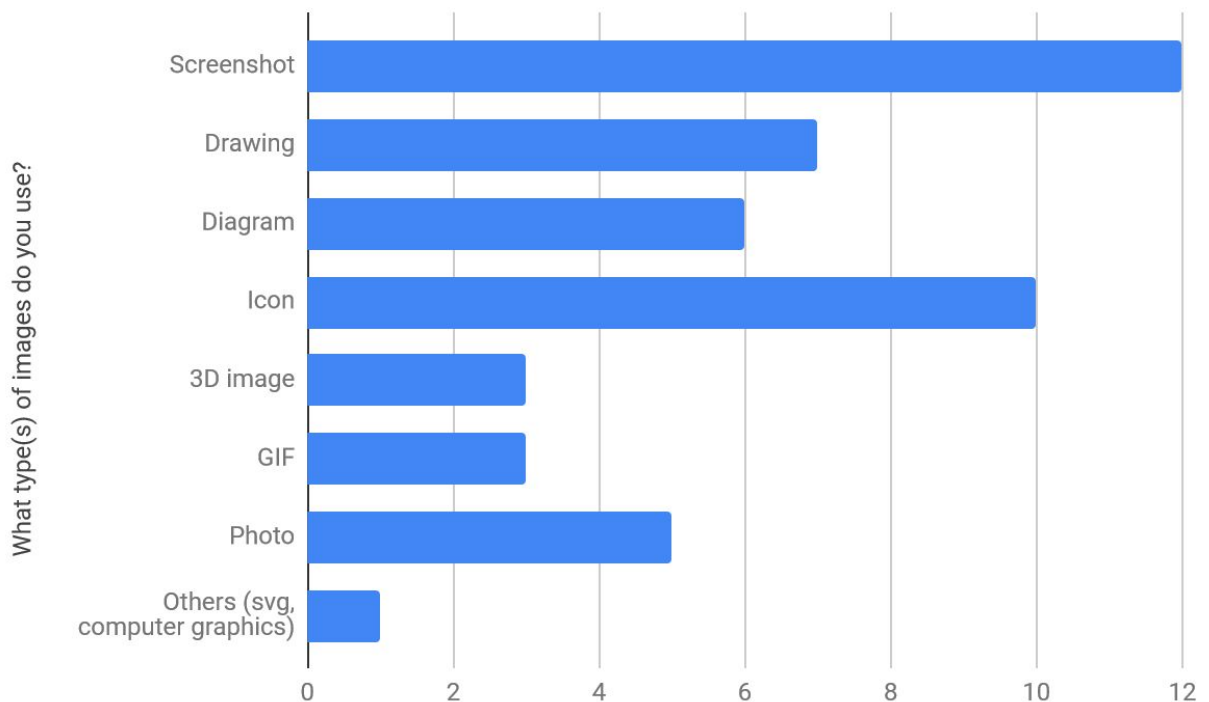
Results of the first questionnaire

Thirteen people from the documentation field answered the first questionnaire. Eleven were students in our Master in Conception of Multilingual and Multimedia Documentation and apprentices in various companies. The two others were a brand manager and a documentation manager. We could see that all of them were using images in their work. They all had to integrate images in various documents and most of them had to create them.

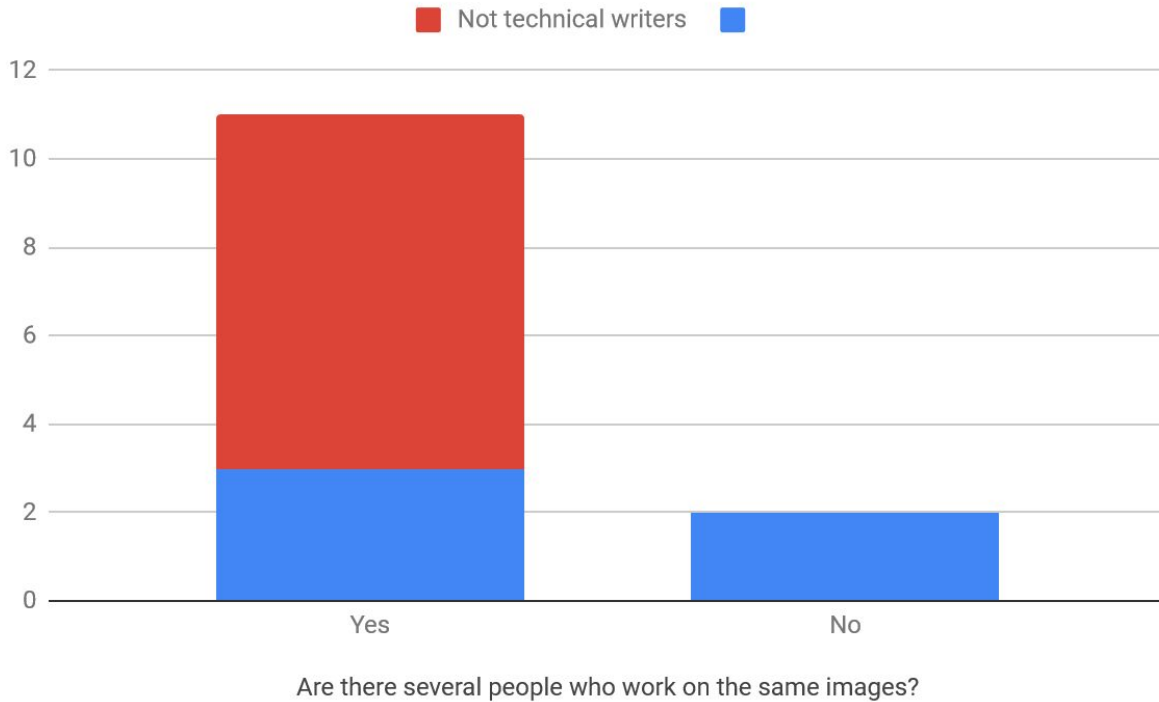


Are you using images in your work? Specify the tasks you must accomplish.

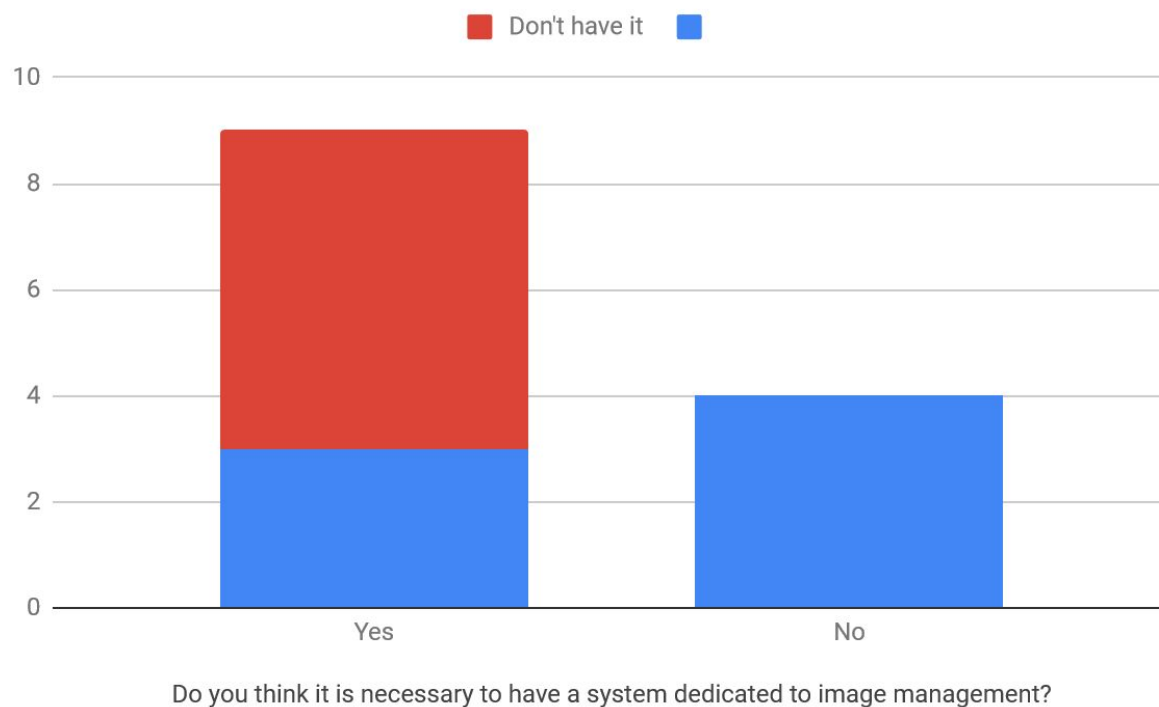
They used different types of images (see the list below), especially screenshots and icons. More than a half of them used drawings and diagrams.



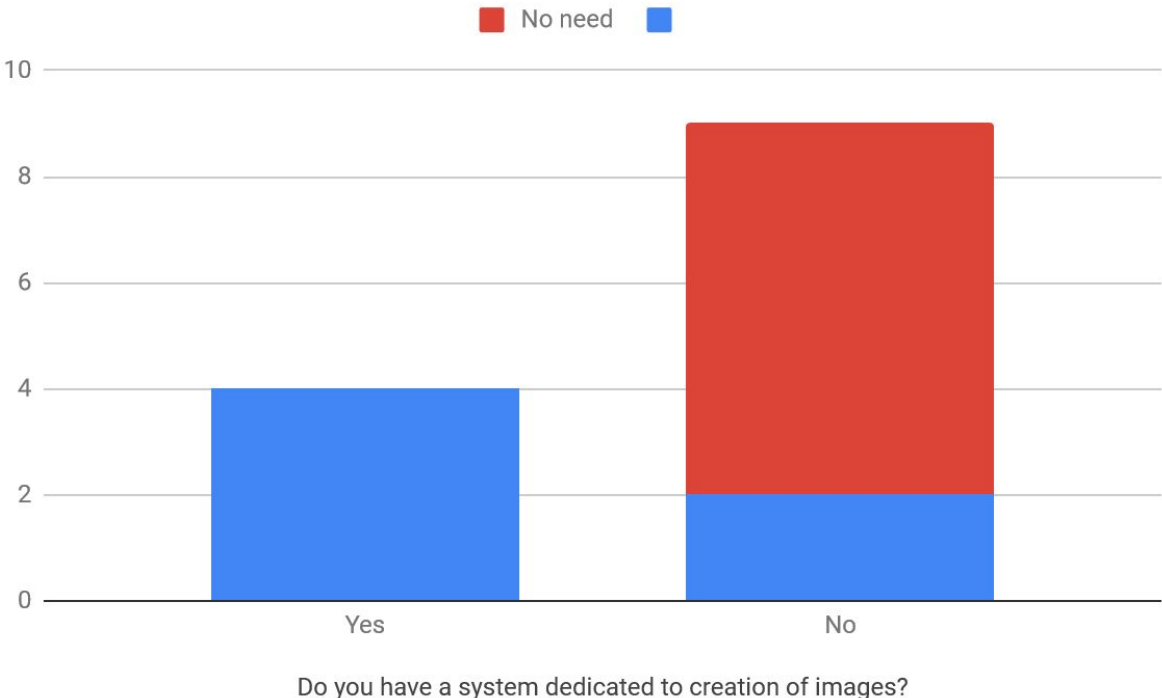
Eleven people answered that several people were working on the same images in their company. Eight of them said this work was not made only by technical writers but also included “graphists”, “engineers”, “assistance designers”, “people from the Knowledge Management, the Communication Service or the Marketing service”.



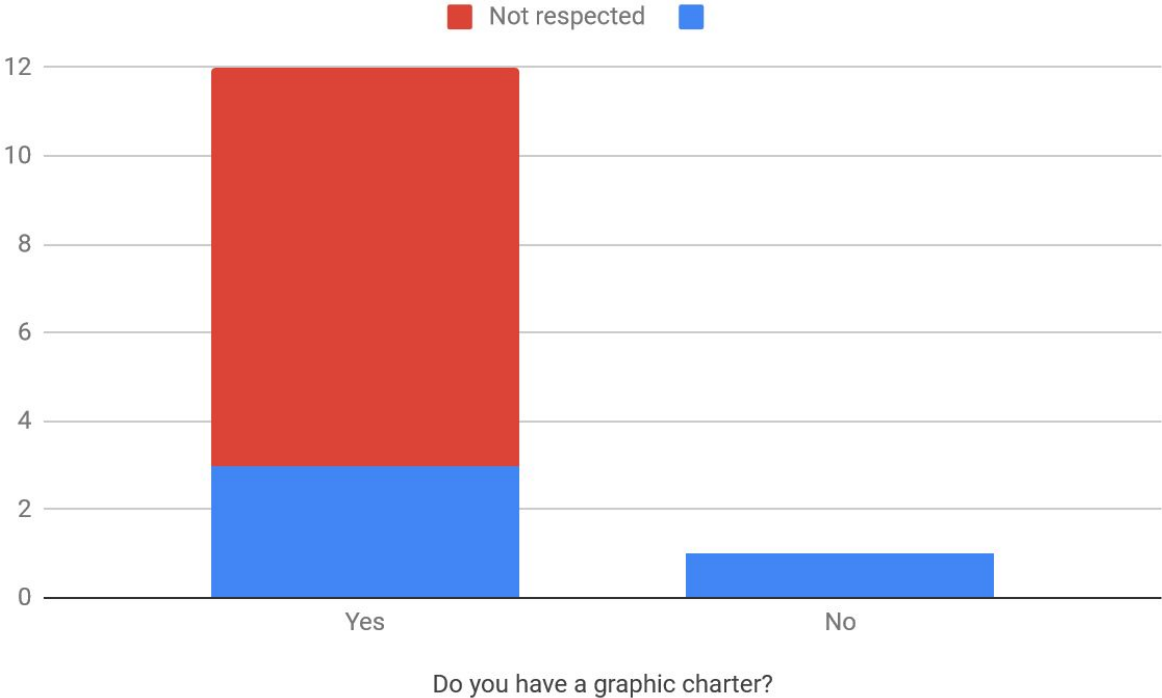
Nine people said they thought it was necessary to have a system dedicated to image management (storage, sorting, search, versioning...) but six said they didn't have it. Many reasons to have such a system were given: make the search of images easier and user-friendly, save time, avoid loss or duplicates of images, manage different versions of images. Only one person said they were using metadata to manage their images (IPTC, Ajaris).



Almost all of them (twelve) said they had a graphic charter but eight of them said it was not respected by everyone all the time.

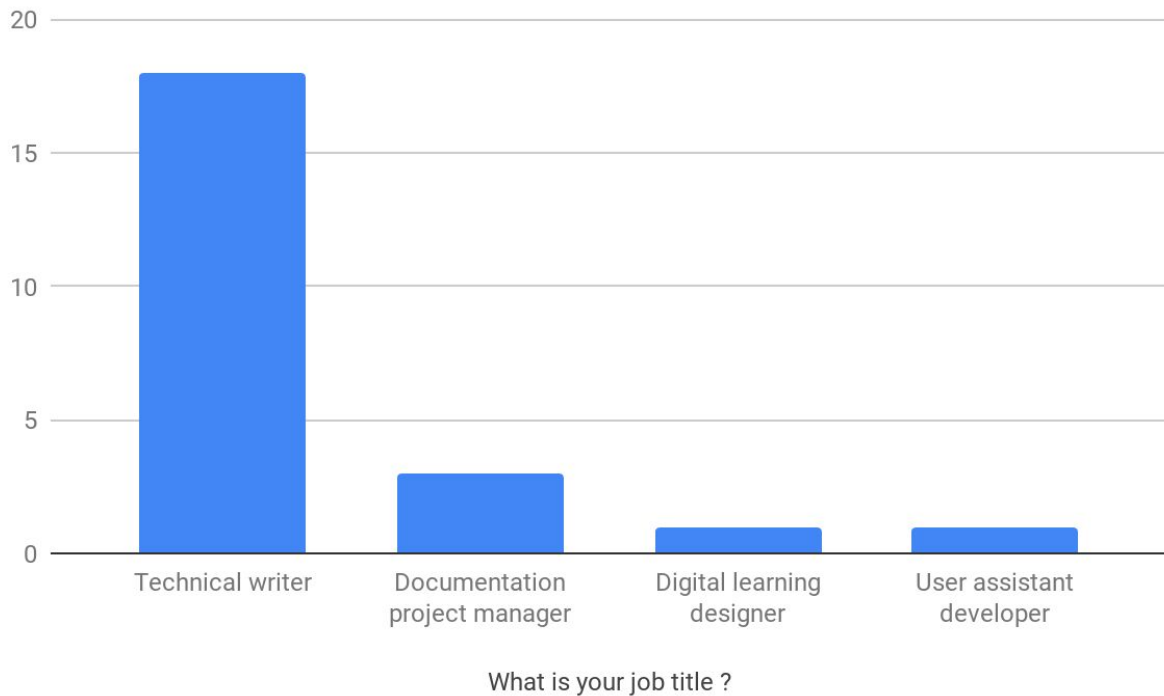


Nine said they didn't have a system dedicated to creation of images and seven thought they didn't need it. Only one indicated that he called on third-party companies to create images. The documentation manager mentioned that it wasn't necessary to have this system because "image creation is not our core business". Those results surprised us so we decided to create a second questionnaire to know why more than a half of the surveyed were not interested in this system and if this comment was shared by others.



Results of the second questionnaire

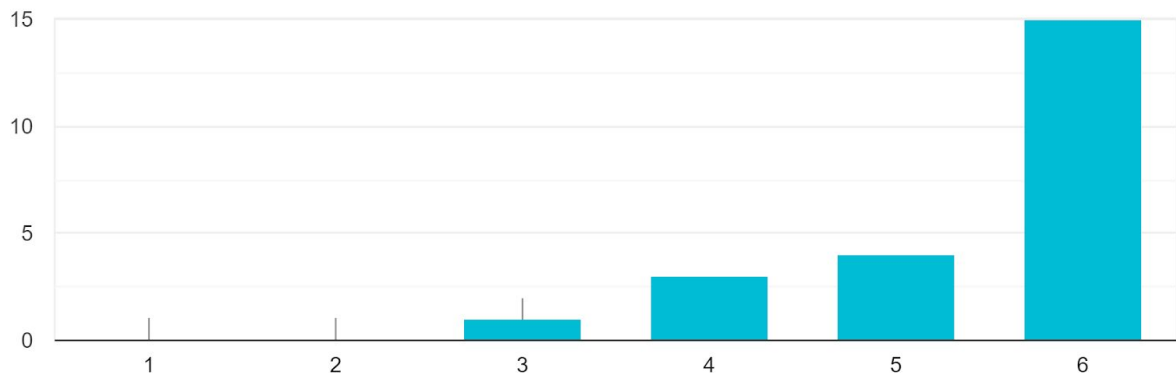
For the second questionnaire we had 23 participants. Those people were from various fields. Most of them worked in industry, medical, computing and military sectors and were technical writers.



On a scale from 0 to 6 (0 corresponding to “not important at all” and 6 corresponding to “highly important”), most of the people surveyed considered that images are important or even highly important in the field of technical writing. Only one person considered that it was not that important. None of the people surveyed indicated a number lower than 3.

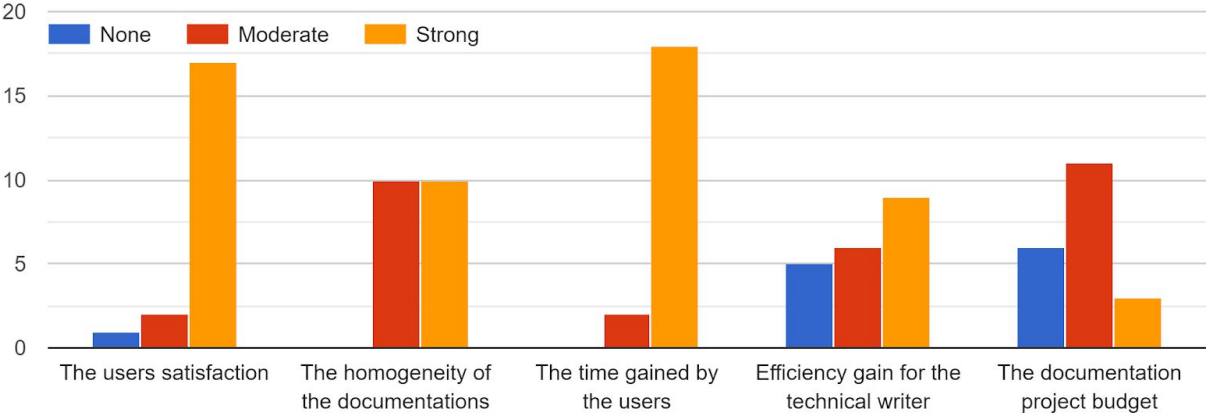
In your opinion, how important are images in the field of technical writing ?

23 réponses

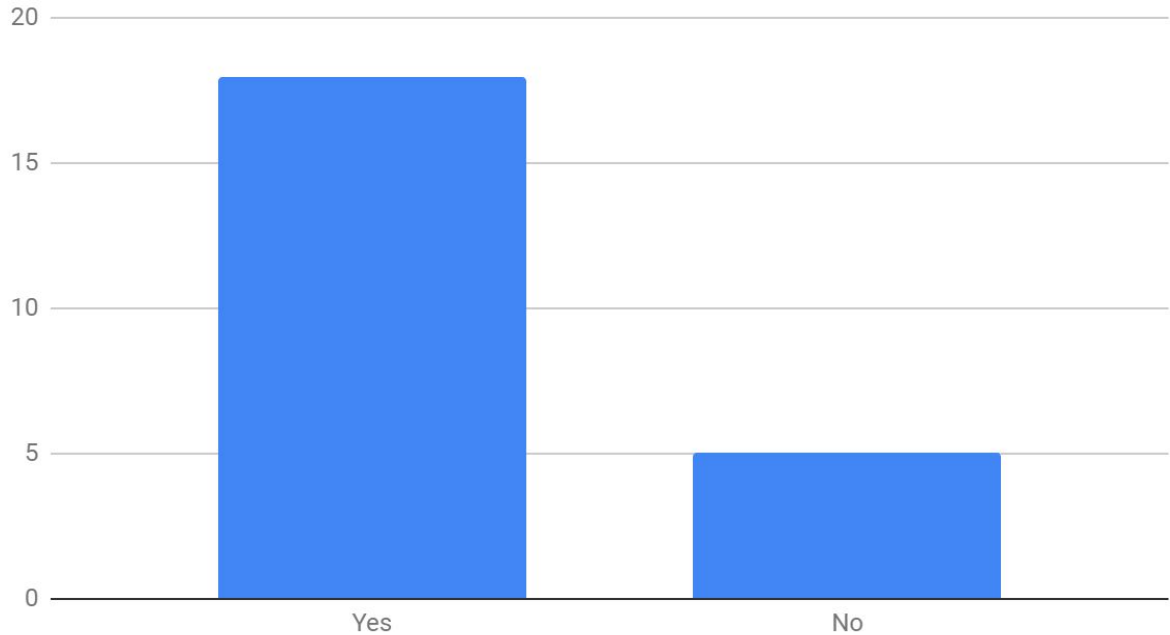


The people surveyed considered that the image management had a great impact on the users. According to their answers, it had a strong impact on the users' satisfaction and the time gained by the users. In the meanwhile, the opinions are mitigated about whether the image management had an impact on efficiency gained by technical writers.

In your opinion, what is the impact of images management on:



There are some of the people surveyed who strongly believed that the creation and management of images were not part of a technical writer responsibility. However, those people did not represent the majority. Most answered that images creation and management are one of technical writers' responsibility.



In your opinion, are images creation and management part of a technical writer responsibilities ?

Results of the different interviews

Is there a clash of generation when it comes to define the role of technical writers regarding the creation and management of images that are incorporated in technical documents?

As shown by the charts below, most of the people surveyed considered that images had an important role to play in technical documents. The majority also estimated that managing and creating images was part of technical writers responsibilities.

The average year of experience of these people was 10 years.

Our technical writing teacher, a senior technical writer who had worked in the area for more than 3 decades had a totally opposed point of view on the subject.

Here follows the interview held with our teacher.

In your opinion, what is the main difference between textual and graphic contents?

Text contents are objectives. A procedure is true or false. Images belong to the subjectivity: choices regarding size, depend on each person's taste. It is more complicated to reach a consensus concerning rules about images.

Can images communicate information as well as texts do?

It is true that images can communicate information faster but not if it is not the appropriate one. Most of the time, they are badly selected and badly integrated into documentations. When you put images in your document, texts come in second place. When there are images in a document, some people don't even read the text. A document that has a lot of images will be more difficult to update than a document with less images.

Is it easier to manage textual or graphic contents?

Historically, we are used to manage text. Content management software are text orientated. Images are harder to index. To index an image, you have to add text to it. We always come to textual content.

When it comes to export documentations in foreign countries, how do you translate an image? How do you make sure that it is adapted to other countries? It is subjective.

Do you consider that technical writers should be the one who manage and create the images that are inserted in technical documentations?

I think that this is not the job of technical writers to deal with images. A technical writer has authority over what he writes. He is the one who takes the decisions when it comes to written contents. He knows more than his colleagues about words and how to manage them. It is not one of a technical writers' responsibilities to have deep technical knowledge about images. Visual representation is another profession. Who takes the pictures? Who has the authority to decide whether an image is the good one or not? In the field of technical writing this is still a pending issue.

Metadata and Digital Asset Management

A digital asset management (DAM) with metadata seems to be the best tool to manage images. It allows users to store, sort and search a large amount of images easily (Brathwaite, 2011). According to our teacher in information architecture, this tool is found especially in marketing services or in online sales companies.

We asked an expert in digital asset management his opinion about this system and the technical writing field.

Why is digital asset management and metadata important to manage images?

DAM and Metadata is important in all industries everywhere. Metadata management is a strategic imperative in the endeavor to effectively manage and exploit a company's content and imagery. The successful implementation of any content-related strategy – for images – requires implementation of a holistic metadata schema that is supported by technology, people and process. Metadata increases the return on investment of a content system by unlocking the potential to ingest, discover, share and distribute assets.

We thought that we were more about to find this kind of system in the marketing service or in online sales companies. Do you agree? Are there other sectors of activity where it is important?

DAM and Metadata is important in all industries everywhere. It is most often found in the Marketing Department as initiated by the CMO or other senior director responsible for content, digital, marketing, etc.

After we conducted a survey, we noticed technical writers in some companies don't have such a system. In your opinion, why?

It is an unfortunate situation to learn when the value and power of DAM is not recognized in organizations. The answer as to why is a complicated one. In some situations, companies may not be "mature" in DAM capabilities and not aware of solutions to help their work. Similarly, other companies may not have discovered their "business case" for a DAM and the power of metadata in managing their content. Lastly, some companies do not have any governance to manage and oversee the creation and management of images. In summary, it is the fact that companies are not mature in their business practice to identify this problem and not act upon it.

Discussion

The results of our research confirmed what we first assumed: images are one of the main tools that help transmitting messages to users. In fact, all of the people surveyed declared that they used at least two of the types of images proposed and that they do create, modify, store (...) images. According to Mitschke, “almost every technical writer uses screenshots or small graphic representations” (Mitschke, 2017). We couldn't find any international standard for image creation and management. But creating and respecting rules and processes for images in a single company makes documentation more homogenic and easier for users. According to our teacher in illustrations, it is a guarantee of quality of the documentation. As users are also more sensitive to images, any mistake in an image would be detected faster and have a worse impact on them. Knowing images are that important to communicate information, it is legitimate to wonder who is in charge of those images, and what rules govern their creation and management.

With our various results, we could notice a paradox between the awareness of the importance of images in the documentation and the lack of responsibility from a minority of technical writers who don't consider image creation and management as one of their duty while they use and create images in their daily job. However, most technical writers surveyed are aware that images play a significant role in technical documents and do consider that this is part of their responsibility to create and manage them. Though, there seems to be a gap between junior and senior technical writers, the latest tending to consider that it is not one of their responsibilities. In practice:

- Most companies do not delegate the task to a specific person. The same image can be modified by various people before being put in technical documentations, which is one of the cause of images poor quality.
- Written contents come first. Images are put in second place. Generally, technical writing services have writing guides but not all of them have a graphic charts that rules images creation and / or management, neither do they have a dedicated system to store, archive, manage the versioning (...) of their images. When a graphic charts exists, as shown by the results of the first questionnaire, they are not respected by all the people that interact with images.
- Some companies subcontract the creation and the management of their images.

What happens in companies do not match the answers collected from most technical writers who consider that they should be in charge of images that will be integrated in technical documentations they work on.

Who is best placed to create an image that will be integrated in a document than the person who is in charge of that document?

For a same document, images creation shouldn't be separated from text creation. Let's bear in mind that the profession of technical writer as know nowadays is quite recent. It emerged during World War II according to the STC. It has been then admitted that writing technical documentations should be delegated to a specific person, trained to do so. It is possible that

many companies are not mature enough to admit that for a same document, written and graphic content should be the responsibility of the same person. In 2013, Hulitschke and Weber observed that in Germany, 39 per cent of technical writers were expected to create and edit illustrations and needed the corresponding skills (Hulitschke and Weber, 2013). One year later, Goldstein wrote there is an “imaginary wall between technical writing and graphics” and technical writers have to “[remind their] colleagues and managers that [the technical writer’s] skills don’t begin and end with writing” (Goldstein, 2014). This opinion was also shared more recently by Parker who wrote “techwriting isn’t only writing itself, [a technical writer] will be asked to create visual content — screenshots, graphics” (Parker, 2018). Thus, mentalities seem to improve with time.

On the other side, universities that offer training for technical writers show they are aware that technical writers need technical knowledge to manipulate images. For instance, our master degree offers courses on images (characteristics of images, creation of vectorized images...). The course for technical writers at the *Université de Limoges* has integrated a course on infographic and image processing in its teaching unit “Fondamentaux de la rédaction technique” (technical writing fundamentals). The *Université Blaise Pascal* at Clermont-Ferrand offers a Master in Engineering of technical and multilingual documentation that proposes a course visual and graphic design.

But still, even if those courses offer illustration classes, the subject remains marginal comparing to writing classes. Maybe entities which grant training to technical writers should rethink their programs so they can be more in accordance with the profession’s reality.

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Ricarnie is a documentation project manager at Thales LAS France. She first studied translation. In 2018, she obtained a Master degree in Translation and Business Communication. To complete this Master degree she did an internship at Expleo, in the field of technical writing. Then, willing to become a project manager in the field of technical documentation, she turned to the CDMM (conception of multilingual and multimedia documentation) Master, which allowed her to reach her goal.