

The impact of a technical writer shortage within an organization

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The purpose of this article is to verify that well-written documentation has an impact on the success of a brand and has an impact on customer service costs. The methods and KPIs (Key Performance Indicators) that can analyze performance will be identified and analyzed using a survey and through research.

To examine the impact of technical writers on company performance, we explored whether companies don't hire technical writers when they need them. To do this we conducted a survey.

According to our research, technical writers seem to perceive a clear link between their work and company performance. Documentation impacts product usage by end users and costs for companies to operate and produce. Cost is particularly impacted through user demand for customer service.

Experts and professionals have identified ways to measure company performance, although their application does not appear straightforward for all. This was demonstrated when we interviewed a group of technical writers on how to measure the impact of technical writers on company performance in practice. In this scenario, respondents were more skeptical about the methods mentioned by respondents of the questionnaire.

Keywords: Technical writer shortage, Documentation, Customer service, Company performance, Impact, Technical writers, Documentation quality, Information usability, Performance

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Introduction

Over the course of an internship, from experience and through the connections we made, we observed that documentation is more important to some companies than others. In the most extreme circumstances, when a product is complicated to use and the quality of documentation was given low importance, the customer can think the product is unusable. In these cases, customers will depend on customer service to help them use the product. This requires companies to put a lot of resources into their customer service department so that their product remains usable.

It has been established that having clear documentation avoids using excess resources on customer service (Johnson, 2017). We have also witnessed the need to review documentation written by engineers - because it did not meet consumer needs.

All this led us to believe that:

- Having a technical writer in the documentation process can lead to better documentation.
- Documentation can be linked to company performance.

After first asking ourselves whether documentation impacts company performance and whether technical writers impact the quality and cost of documentation. We then want to observe the link between technical writers and company performance.

To examine the impact of technical writers on company performance, we intend to explore whether companies don't hire technical writers when they need them. To do this we conducted a survey.

We would like to verify that well-written documentation has an impact on the success of a brand and has an impact on customer service costs. Reviewing survey responses and researching which methods and KPIs (Key Performance Indicators) can analyze performance.

Methods

A qualitative approach was taken to research the impact of technical writers on organizations. Obtaining quantitative information was likely to be difficult, as you need many respondents. There is also a risk of bias if one group is more represented than another among the respondents. We were looking for information on respondents' personal experience and views. To do this, two different surveys were undertaken.

First, a questionnaire was created to observe different views on how (and if) technical writers impact their organization. Respondents that were targeted are technical writers and other professionals in a position where they can observe the impact of technical writer's work.

Second, technical writers were interviewed on how the impact of technical writers can be measured. Testing the proposed methods is out of the scope of this project but could be an interesting object for further research in future projects. Being knowledgeable of methods for measuring the impact of technical writing is also useful for professionals to prove their worth.

The interviews dealt with the topic of performance measurement, while the questionnaire revealed views on when a company lacking a technical writer and the technical writers impact. Interviews and surveys were therefore complementary in the information they collected.

These surveys will provide us with new answers and potential controversy if answers contradict each other. They will also allow us to either confirm or reject our hypotheses.

Questionnaire

The first part of the questionnaire was used to filter respondents. This was to identify potentially biased views and differences in responses based on profile (i.e., professionals that are not technical writers and have never worked with a technical writer; differing points of view between technical writers and non-technical writers).

The second part of the questionnaire was designed to enable respondents to formulate their own hypothesis in relation to our problem, based on their own experience. It contains questions to determine their views on when there is a shortage of technical writers, and on the impact of technical writers on the success of their organization.

Interview

A team of technical writers were asked how the performance of a technical writer can be measured within a company. Results can serve as a starting point for further reflection on the matter.

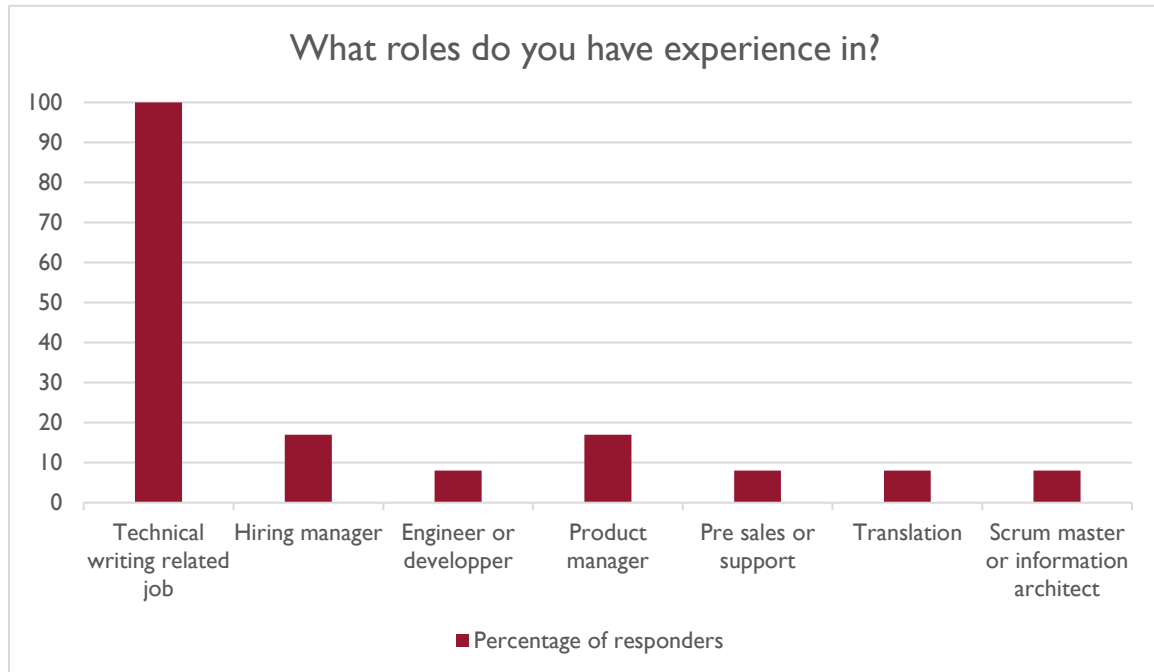
Results

Results are organized in two parts, first the results from the questionnaire we circulated and second, the feedback from the interview.

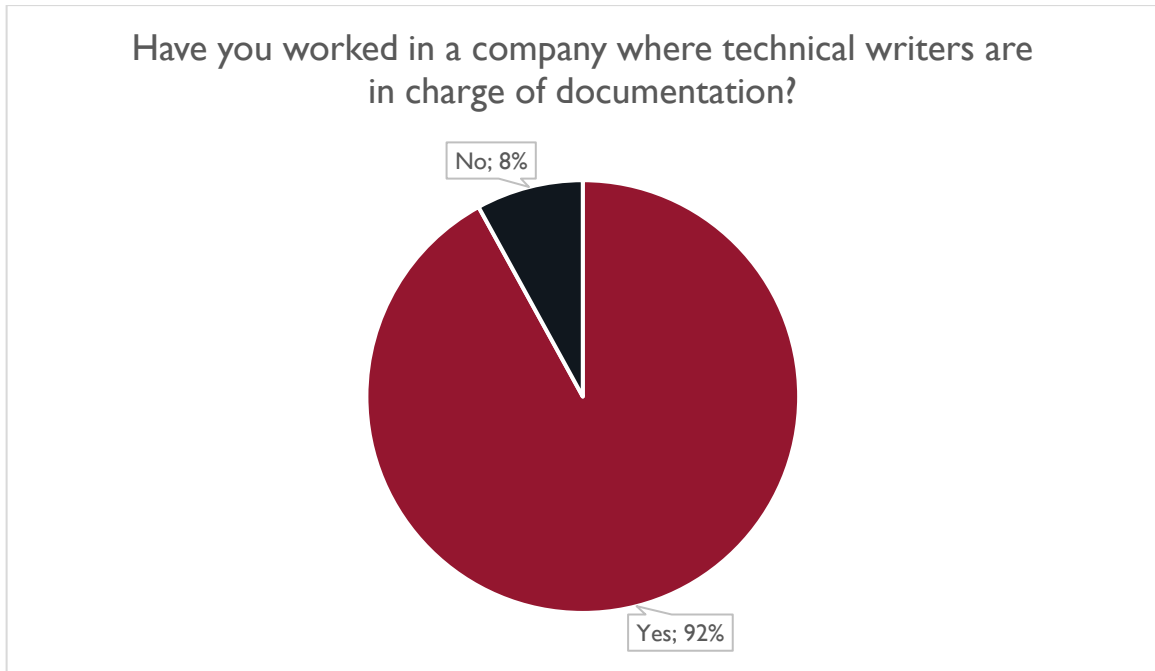
Feedback from the questionnaire

All our respondents have already worked in a technical writing role, and some of them also occupied another position such as hiring manager, product manager...

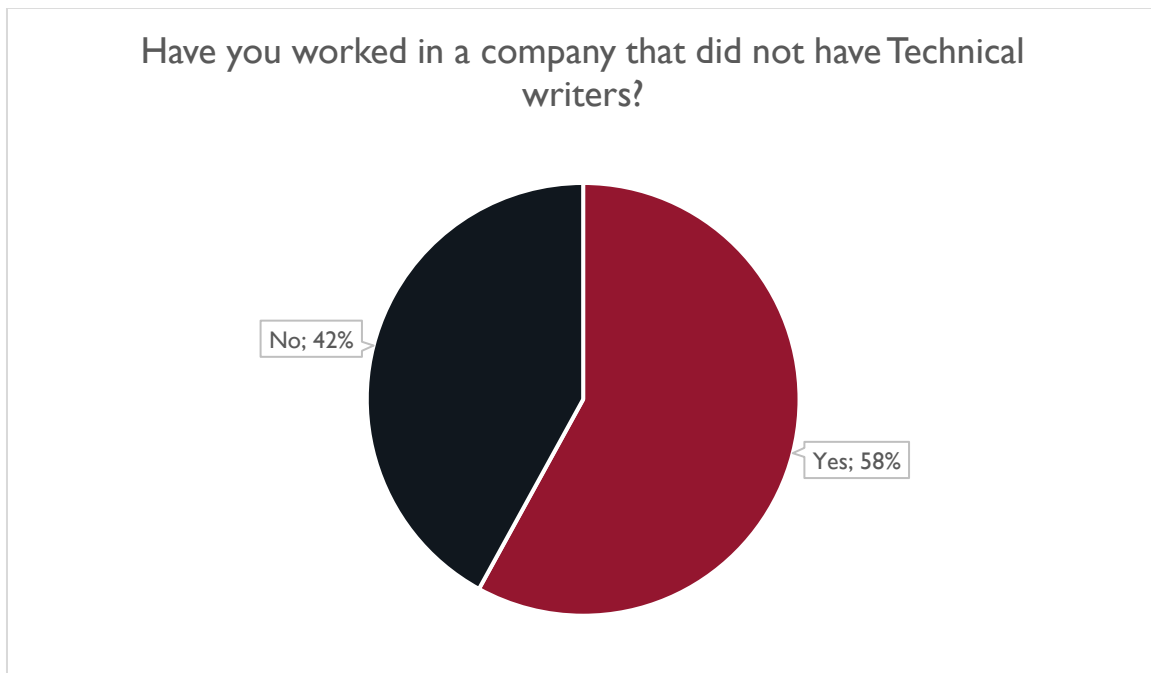
As we can see in the following graph:



When asked if they have already worked in a company where technical writers oversee documentation, most answered “yes”, as we can see in the following graph:



This is with an exception of 8% of respondents that have never worked in a company where the employees in charge of documentation were not technical writers. This shows us that even to this day some companies do not employ technical writers to be in charge of their documentation. This point is even further demonstrated by the answers to the following question:



When asked if they had ever worked in a company that did not have any technical writers, more than half of the respondents answered “yes”.

This shows us that most of the people now working as technical writers have worked in a company that did not have technical writers.

This can mean two things:

They were the first technical writers in the company, or they occupied a different position in the company prior to becoming technical writers in their next company.

Either way, there is a vast majority of respondents that have experienced working in a company without technical writers.

At this point, we realize how important the respondent's feedback is, because as we have previously seen, they have witnessed a work environment that did not have technical writers.

The next question we decided to ask was "When does an organization need a technical writer?"

We classified the main factors in answers that we received into 3 categories:

Changes in markets and customers:

- Market growth
- Customers needing support with products
- Selling products to multiple different user profiles
- Customer facing documentation involvement

Documentation needs change:

- Processes needing to be provided in written form
- Documentation explaining the product is needed
- Documentation written by professionals is needed
- Need for knowledge management

Startup Phase:

- Early incorporation of technical writing in the startup phase, even for a company created 2 to 3 months prior
- Startup starts manufacturing or distributing products that require explanation

We can see that there are 3 main themes that are the most impacted by the presence and absence of technical writers:

- Easier communication with the customers and the market
- Easier communication within the company
- Company growth

It seems quite clear that there are several reasons why a technical writer is necessary in any company but especially in a growing company.

We also thought it would be quite useful for our research project to find out the repercussions of the lack of technical writers in a company.

Which is why we asked them “How does the absence or lack of technical writers in an organization impact it?”

Respondents identified the following impact on documentation: it tends to be below-quality, hard to find, hard to understand, unorganized, not updated, not written efficiently, not adapted to the right user, marketing and technical documentation might get mixed up, there can be a lack of consistency.

All of these elements have a direct impact on various company elements which give a bad image to a product/company.

It leads to misunderstandings between different perspectives (marketing vs. technical).

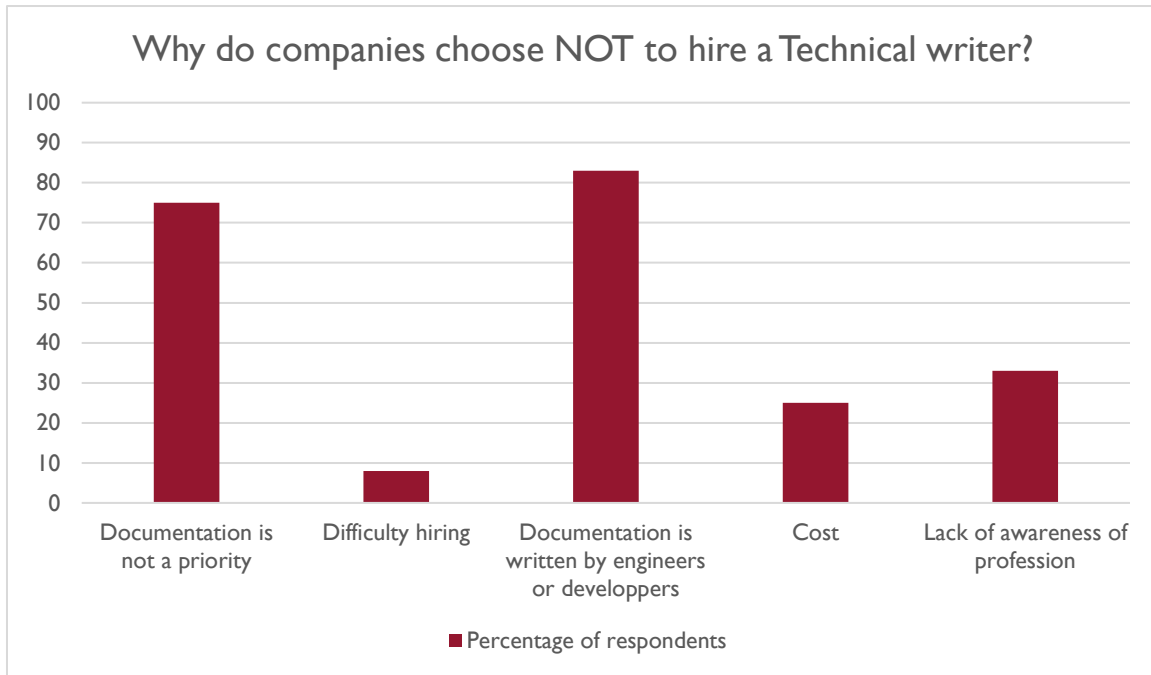
It increases risk to processes and products, as well as liability. If the safety of users is compromised, this also leads to legal problems.

More service and support requests from customers means less resources for the company to use elsewhere.

After seeing the results from the lack of technical writers in a company, we can see that the outcome is mostly negative. It is easy to conclude that the opposite - the presence of technical writers in a company - has positive results, but to what extent is this the case? According to our respondents, there are many positive outcomes when hiring a technical writer, as they can:

- significantly improve the user experience.
- offer a unique perspective on the product and can provide valuable feedback.
- set minimum standards, create a style guide, and review content produced by other professionals, enhancing technical user-facing content.
- focus on content creation while supporting QA and development professionals, reporting bugs, improving workflow, designing UI content, and contributing to internal knowledge management.
- reduce risk, improve processes, and reduce liability.
- “Bring order to the chaos and provide a company's "mind " and "memory " function.
- efficiency gains, consistency, and improved quality in content production and other areas.
- create good documentation that will serve as a reference for the product and benefits of using it
- saving time for the development and support teams, users, other stakeholders.
- increase the safety of the product as it would be easier to understand how to use it
- increased sales.

At this point in our research, it seems like there are many benefits to having a technical writer, yet as we have seen in the previous answers many companies don't necessarily have one. Which makes us wonder why.



As we can see in this chart, the main reason why there are no technical writers in some companies is that other professionals, mostly developers and engineers are in charge of writing the documentation for the products they produce, this first point is further proved by the fact that 75% of our respondents believe that documentation is not a priority. That is why at some companies technical writing tasks are given to someone who has a technical job but is not a professional writer.

As with other jobs, the cost is also one of the reasons why companies do not hire technical writers, as they believe other people in the company can satisfactorily complete technical writing tasks.

Another reason which seems to be more specific to this job is the fact that it is quite unknown to the public, and as people in HR do not even know it exists, companies fail to hire people solely in charge of technical writing.

As we can see there are multiple reasons as to why some companies do not have technical writers. It is also important for us to find out how to measure the effects of the lack of technical writers. The next logical question is: What are the best ways to measure documentation performance?

According to our respondents, the methods for measuring documentation performance are the following:

See if there are less:	See if there is more:	How to measure:
<ul style="list-style-type: none"> - support tickets - questions asked to the support team by customers - resources used 	<ul style="list-style-type: none"> - user empowerment - user satisfaction - purchases of the product - sharable content 	<ul style="list-style-type: none"> - test steps before publication - ask for feedback from end users - research before writing

“THE DOCUMENTATION DOESN'T FOLLOW THE RULES OF TECHNICAL WRITING, THEREFORE IS LESS ACCURATE AND UNDERSTANDABLE. CLIENTS CANNOT RELY ON IT. THEY WILL HAVE TO ASK THE COMPANY WHICH WILL NEED A SUPPORT TEAM TO EXPLAIN HOW THE PRODUCT WORKS.”

“THE SHORTAGE OF TECHNICAL WRITERS WITHIN A COMPANY IMPACTS THE QUALITY OF THE DOCUMENTATION LEADING TO ISSUES DURING THE PROCEDURES EXECUTION.”

“IT'S A MISSED OPPORTUNITY IN MANY WAYS FOR THE ORGANIZATION.”

“COMPLETELY CRIPPLING. BUT OFTEN INVISIBLE. COMPANIES CREATING THINGS OR WITH PRODUCTS OR SOFTWARE THAT DON'T HAVE TECHNICAL WRITERS LONGER THAN A 1 TO 2 YEAR PERIOD, LOSE TONS OF MONEY AND QUITE OFTEN DON'T SURVIVE BEYOND A FEW YEARS AFTER THAT. THE TECHNICAL WRITER IS KEY TO THE STRUCTURE OF THE COMPANY, AS WELL AS THE USEABILITY AND FUNCTIONALITY OF THE PRODUCT. TECH WRITERS ARE ALSO A BACKUP TO QA. AND OFTEN FIND A LOT OF BUGS THAT QA MAY HAVE MISSED, OR THAT WERE FIXED AND BROKEN AFTER QA HAD GONE THROUGH.”

“COMMUNICATION IS BETTER AND THE WORK OF TECHNICIANS IS LOWER.”

Overall feedback from the interview: How can the performance of technical writers, within a company, be measured?

Measuring a technical writer's performance in a quantitative way is often not reliable. For example, a technical writer could write only a small page or section and at the same time write many pages depending on the complexity of the subject. Therefore, measuring performance based on the number of pages produced would be uninformative. The same applies to the number of documentation request tickets processed, some could take weeks, others a few minutes (e.g., correcting a typo).

More qualitative methods can prove more insightful, such as customer feedback. For example, a customer expressing a positive view on the documentation or expressing their satisfaction in comparison to the documentation of other companies. The support team can be a useful point of contact for technical writers to gain insights.

The fact that it is difficult for technical writers to evaluate their performance quantitatively can make it difficult for them to prove their worth within the company.

Discussion

Let us discuss the results of our survey. To understand the impact of the lack of technical writers on a company, we hypothesized that having a technical writer in the documentation process may lead to better documentation and that documentation may be linked to company performance.

Who writes documentation?

As our survey results confirmed, some companies do not have documentation for their product, or the documentation is not written by technical writers but other professionals like engineers, developers, etc. Let us explore the reasons behind the phenomenon and the consequences it entails.

Why are technical writers absent in some companies?

One of the possible reasons for the absence of a technical writer is a lack of knowledge of the role of a technical writer. 33 % of our respondents assumed that technical writing was not well-known enough and that could explain that some companies did not have a technical writer in charge of the documentation. Similarly, in a research article, Jeremy Rosselot-Merritt (2020) draws the conclusion that company employees did not know what technical writers do:

"[...]despite the importance of communication in organizations, perceptions of TPC [technical and professional communication] as a field are variable and, though participants demonstrate a basic understanding of TPC practice, their perceptions are often incomplete, not reflecting the range of capabilities that TPC professionals often possess."

Another obstacle could be the cost of hiring. This may be linked to the fact that companies consider that documentation is not a priority and that it can be written by other professionals. Consequently, companies choose not to hire technical writers.

How should the performance of documentation be measured?

The second highest reason companies do not hire technical writers, according to the respondents of our survey, is that documentation is not a priority. This brings to light the lack of awareness of the advantages of having quality documentation for a product that some companies can have. Hence the need to gather and broadcast information about the incidence of documentation quality and hiring technical writers as the authors.

Measuring the effects of the documentation generally requires using several metrics and analysis tools. Our respondents mentioned ways to review the documentation: the number of support tickets, direct feedback from the users, sales numbers, self-review, and peer review.

Similarly, Fabrizio Ferri-Benedetti (2020) suggests two methods to retrieve metrics in order to measure the performance of documentation:

1) *“Treat documentation as infrastructure”, meaning the metrics to be analyzed can be the:*

- *“Success or conversion rate of documented processes (including in-product docs)*
- *Time saved by customer support, development and sales, attributable to docs*
- *Decrease[d] (rate of incidents involving internally or externally documented processes*
- *Numbers of internal conversations quoting or linking to documentation.”*

2) *“Treat documentation as a product”, meaning the intention is to use methods used for product engagement evaluation:*

“Check for returning users or customers, for engagement (I’m a big fan of comments in documentation), and for user satisfaction. Ask sales, support, engineering, design, and others how happy they are with the docs. Do they use them? Do they learn thanks to them? Do they sell more?”

Professionals agree that the ways to measure the performance of documentation are numerous and require crossing several metrics to be able to draw conclusions about performance.

Bob Watson (2018) proposes to shift the conversation from cost to value. Outside of metrics and performance, he makes the argument that documentation has an intrinsic value that the author should be aware of and communicate: “For every piece of content you publish, you should be able to articulate the value it adds, how it adds that value, and why it adds that value.” He proposes that technical writers should advocate for the added value their documentation brings to the company.

What happens when the documentation is not written by technical writers?

A lot of our respondents have worked in environments where there either was no documentation or documentation was written by people whose main role was not writing documentation and who had no technical writing background. One of our hypotheses was that the documentation written by non-professionals presents flaws that hinder the efficiency of documentation, potentially harming the reputation of the company, and even endangering users.

Difficulty of use

Knut Sveidqvist (2023) brings to light three ways a software product is harmed by low-quality documentation:

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- “- Bad documentation makes products harder to understand and use.*
 - Bad documentation makes products harder to market.*
 - Bad documentation makes development frustrating and time-consuming”.*
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Our respondent's experience matches Sveidqvist's opinion: ultimately, low-quality documentation is detrimental to a company. The absence of documentation could also indirectly harm the user.

Cost

One of the consequences of a lack of documentation can be a high number of service desk tickets. In a study by MetricNet (Rumburg, 2016), the average cost of a service desk ticket in the USA appears to be around \$16.

The conclusion we draw is that low-quality documentation or the absence of documentation is likely to drive support costs and workload (and consequently the need to hire service desk workers) up. Thus, up-to-date, easy-to-navigate, user-friendly documentation should be helpful in preventing unnecessary tickets.

The advantages of having a technical writer in a company

Our respondents deemed that the work provided by technical writers had a very positive impact on companies: communication between the company and customers, and communication within the company appears to be easier. They also cited an array of tasks that fall under the umbrella of what a technical writer can do.

Suggestions on how to spread the word about the advantages of technical writing

For Jeremy Rosselot-Merritt (2020), there needs to be technical writing promotion actions and training needs to match the actual required skills of the job titles:

“This pilot study suggests that challenges to the professionalization and legitimacy of TPC [technical and professional communication] continue to exist. Addressing these challenges will require continuing alignment of academic and practical perspectives on the field, as well as continued work to promote TPC’s value in a range of workplace settings.”

Therefore, academic studies of technical writing need to focus on practical aspects of the profession, making academic theory applicable in a professional setting. Academic studies should also strive to prove the value of technical writing for companies.

Conclusion

According to our research, technical writers seem to perceive a clear link between their work and company performance. Documentation impacts product usage by end users and costs for companies to operate and produce. Cost is particularly impacted through user demand for customer service.

Experts and professionals have identified ways to measure company performance, although their application does not appear straightforward for all. This was demonstrated when we interviewed a group of technical writers on how to measure the impact of technical writers on company performance in practice. In this scenario, respondents were more skeptical about the methods mentioned by respondents of the questionnaire.

This contradiction could demonstrate the complex and varied ways documentation impacts organizations, as well as the need to evaluate documentation based on a range of indicators rather than a single one. Individual company context may also have an impact on which indicators best measure performance. Another limitation can be the need to measure and compare results over time, including before and after significant events (e.g., a company hiring their first technical writer).

Our findings demonstrate a need for additional information and research into the practical application of methods of measuring the impact of technical writers on company performance. Although findings could be limited by the willingness of private companies and organizations to divulge their data.

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