

PROFILE OF A TECHNICAL WRITER

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This paper discusses problems Finnish hi-tech companies face today in recruiting technical communicators. The profession of a technical communicator is quite recent, and therefore the applicants often lack formal training. Training should, however, be provided, and some basic qualifications hi-tech companies expect the applicants to have are identified.

Keywords: technical writer, training, qualifications.

1. INTRODUCTION

Finnish hi-tech companies share one problem today: they want to hire technical communicators, or technical writers, but they seldom find applicants having formal training in professional technical communication. The reason for this lack of formal training is simple: there is no training for technical writers and thus no educated technical writers. The profession of a technical writer has not been recognized in Finland yet, and each company has to train its own technical writers.

Companies start recruiting by defining a profile for a technical writer. This profile lists those qualifications that the companies feel are necessary in succeeding in this job. It is, however, not easy to create a profile for a technical writer since the concept of technical writing is so new in Finland. There are no ready-made profiles you could use so each and every one of the Finnish companies create their own profiles.

I aim at describing some qualities I feel are necessary in performing well in technical writing. The profile I have created for those technical writers who work with me is quite recent and is subject to changes caused by changes in the technology and working environment.

This paper is based on another paper I gave in Vienna in August 1995. There are similarities between these two papers but the scope of these differs: the paper presented in Vienna discussed the details of the implementation of a training programme in one Finnish hi-tech company whereas this paper has been brought down to mere basics of technical writing and technical writers.

2. TECHNICAL WRITER IS A MEDIATOR

2.1 Reason behind recruiting mediators

The reason why industrial companies look for new professionals is technology. Technology is becoming more and more complicated, and its complexity gives way to new expressions and new concepts that the laymen are not so familiar with. There is a danger of technology becoming a code that can be broken by initiates only - engineers write language only other engineers can understand, marketing professionals write language only marketing people can decode. To prevent the laymen from becoming excluded from the world of technology and from the messages transmitted by experts, companies need to make sure that their latest gadgets are documented in the way recognized by the laymen.

This problem is solved by having mediators between the experts and the laymen. The mediators translate the complexities of new products into easy-to-understand everyday language. These mediators are typically communications experts because they have the necessary knowledge of communication and problems in communication. Why communications experts? Some scholars have claimed that it is harder to teach communication skills than to teach subject skills and that it is easier to learn subject skills than communication skills. The latter claim is supported by the fact that even graduates in technical fields need job-related subject training and usually learn fast. Teaching creative writing to someone whose mind is mathematically-oriented is more difficult, or reaching the objectives set takes a longer time.

2.2 Skills of analysing and organising information

The role of the mediator demands certain skills from the people aiming to become technical writers or communications experts. Writers as mediators need to understand the complexities of a product at a basic level at least in order to be able to discuss the parts and functions of the product. They have to be able to organize pieces of information. They have to be able to understand the hierarchy of things and recognize the relations between the things:

what is a concept and what are the subconcepts. If the concept system for the product is totally lacking, the writers may have to create one. Knowledge of terminology work is thus a great asset.

Writers have to analyse a lot of data to find out the relations between things. They have to collect a lot of information from different sources and then be able to make conclusions to crystallize all the data into a few sentences. This means that you need to have an eye for the details but you also need to create logical entities. These details and entities need also to be arranged in such a way that the readers can use their internal models of understanding to decode the message. By internal models I mean the ways people perceive information: wholes are seen before parts, large is perceived before small and outside can be detected before inside (van Dijk 1977).

Writers need to be curious (in the positive sense of the word). They need to be ready to do some research and willing to take a look at new aspects of a product. They also need to be independent in the way that they know best when more research is needed. But how can you detect relevant information from a mass of technical data and be sure that you have collected enough information? These are the types of questions technical writers should be able to answer. They are the best judges of their work, and they can consult experts to find answers, but the final decision on the extent of the material must come from the writers themselves.

This ability is very difficult to measure in an interview, you would need psychological tests. Yet, one meter the employer can use is the thesis written in the university - a prerequisite for graduating. No thesis - no graduation and no degree. A completed thesis may indicate that you can analyse data and draw conclusions.

2.3 Open and energetic people needed to get the necessary information

To find out the data they need, writers have to find their contact persons. They have to be open and energetic in order to weed the information from the experts. They have to be prepared to melt a rock because the mind of the expert may be set on higher goals having more priority than documentation. And there usually are setbacks because technical experts are always short of time. Writers need to be flexible and able to get along with people. And what is even more important, they would need to be quite tough because they will meet rude people, busy people, bitter people, etc. They have to find their way with all these. Despite all their efforts, there may be answers they have to find out on their own by a certain deadline which means that writers should not be afraid of a lot of work and tight deadlines.

2.4 Skills in project work

Documentation is written extensively in projects. This sets some restrictions to the work of those taking part in a project. The project sets timelimits, it defines what can be done at which phase. Writers are given strict deadlines - their work has to be finished before someone else can take over.

Some writers do not know how to react to these deadlines because they lack the ability of knowing what might be a realistic estimate for an assignment. This has to do with the fact that project management and time management are not taught at schools, institutes or universities. New writers lack all abilities of setting timetables to their own work. Yet they need to agree or disagree with the deadlines set by the project. They usually agree because they have no justification for disagreement.

Employers have to provide writers with methods and tools for project management and time management. This is essential for effective operation of a documentation department. Writing a document can even be said to be a project of a sort: it has a beginning and it has an end. And the start time and end time can be located on a time continuum which sets the deadlines. When the work load has been distributed equally between the start time and the stop time, writers estimate whether they can survive the work load or not.

2.5 Skills in the English language

Most of the work load comes from checking the most interesting ways of expressing things. So, one crucial prerequisite are excellent skills in the English language (both written and spoken), or any other language that has been chosen to be the media of the documentation. Teachers have excellent skills in English because they have to transfer their knowledge to their pupils. Translators have excellent skills in English because they have to reformulate the message in another language without changing the original idea of the message. Linguists can analyse the language on the sentence level, or text level, recognizing interference caused by other languages. All the roles mentioned above are able to handle text written by someone else but are they able to write themselves?

The problem in hiring experts in languages is that you get so many people with different backgrounds and you have to be able to judge the real level of their skills in English. Writers have to do more than write themselves - so their knowledge of the English grammar is not enough. They have to be able to analyse the language to make out the meaning; this especially when they are reading the source material.

2.6 Writing skills

Writers would need to learn to write before they are taught how to translate. Companies can no more offer mere translation jobs to their employees. Rather they need people who can do all sorts of things: proof-read, edit, translate and write. This leads to the fact that technical writers should be flexible and willing to do all sorts of things.

I would like to stress the importance of teaching people to write first before they are taught how to translate. Writers need to analyse a lot of data, and that data cannot be handled when translation phase begins. It needs to be dealt with earlier. This kind of training should also stress the problem of language interference in technical texts and provide the students with the means of correcting language written by someone not so aware of language interference.

3. SOLUTIONS TO PROBLEMS CONCERNING FINDING MEDIATORS

3.1 No trained writers - arrange education

As has already been mentioned, the major problem in hiring technical writers is that there is no training for technical writers in Finland. Universities educate people to become teachers or translators, or students of humanities graduate with a degree but no profession.

The situation is, however, improving all the time. One Institute of Technology has in 1994 started a programme which aims at giving future engineers training needed for technical writers. The first engineer-writers, or writer-engineers, will graduate in 1998. The communication skills taught in this institute resemble those given for journalists, so the level of the skills needs to be examined in due time.

One University in Finland, namely the University of Oulu, has taken up a course for those who are interested in communication and technical writing. This is an 8-month course at the moment and marks a beginning of a new understanding of the way things are in the Finnish society. The course provides the students with many skills ranging from writing to multimedia. The students also have to go out on the field for practice, which gives them a chance to apply the skills they have learnt.

The University of Vaasa in Finland is planning professional training for post-graduates who are working as technical writers but who were not originally

trained to be technical writers. Finnish hi-tech companies have contributed in the design of the syllabus, and at the moment discussions are being led on the funding of this syllabus.

3.2 Make sure language skills consist not only of translating

For the time being, the Finnish hi-tech companies just have to train their own people. One major area in the professional training is language training which is actually training in technical writing. There are basic courses in designing documents and theory of technical writing. Application of the theory is something the writers need to learn by themselves because we have found out that nobody can actually teach our writers how to apply all the nice theories in practice.

When designing of documentation is being taught, writers are shown how to outline their text in relation to other texts. They need to define how much of the existing material they can use and how much will be totally new. They may have to create a new structure of documentation for a new product so they have to be able to classify things in relation to others.

It is important that the writers write about many things because their work will keep on changing all the time: today some writer may be writing about handovers, tomorrow his responsibility may lie on performance measurements. New areas of responsibility also mean running into new terminology that has to be dealt with properly.

The education given in the universities gives the students the necessary tools to analyse language at sentence level. This is a skill that is needed when reading source material written by someone else than a communications expert - you need to recognize interferences, Finnglish, technical jargon, etc. It therefore follows that grammar and style need not be addressed so much as design skills.

3.3 Equip the writers with an open mind and trust on the future

The future is always somewhat unknown. The technical writers should be able to adapt quickly to the continual changes. We cannot give guarantees that what they learn today can be applied tomorrow. So, technical writers should be eager to meet new challenges, they should not be afraid of the future, and especially of the unknown. They cannot rely on today and get their basic security from today's methods and assignments. They should rather be ready to jump into the unknown, they should be able to find security in the unknown. These people are difficult to find, and no matter what they say in an interview, they may contradict themselves in reality.

This problem can be tackled by arranging product training for all products the writers are supposed to write about. The training does not need to go to details of the products (in our case, the bits), instead the basic functionality and the most important features are enough.

The fear for the unknown can be eased by arranging training on project management. It is important to tell the writers the phases of the projects and discuss their contribution to the project as a whole. Estimating work loads and defining documentation timetables also gives them trust on their own abilities. Project work makes them more independent and gives them a chance to use their decision skills.

CONCLUSIONS

In this paper I have tried to identify the lack of formal education for technical writers in institutes and universities. Education given in universities and institutes is not serving the needs of the industry. Could it be that universities are concerned with sciences and not with their applications? Could it be that companies value applications more than pure sciences? Could it be a matter of applications emerging more often than what science is ready to handle? Could it be a matter of lack of communication between the universities and the companies? I am not ready to answer these questions yet since my professional career as a documentation manager is relatively short but sometimes finding the right question helps more than finding an answer.

There is a need for this new profession, and this profession needs to be recognised. Its future seems promising enough because of new technology emerging all the time. Now it is only a matter of starting discussions on the development of training and cooperation between different organizations.

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