

THE VALUE OF TECHNICAL DOCUMENTATION

Introduction

While technical documentation is widely considered an invaluable asset for business procedures, training, and quality assurance purposes, few standardized measures or ‘metrics’ exist for determining its exact value, the actual ‘quality’ of said documentation, or the productivity involved in its creation.

However, it is possible to establish the ‘value’ of documentation if metrics exist for the procedures relating to the documentation.

Determining Value

The value of technical documentation can be measured in two ways.

The first involves technical documentation as a reactive measure. By having a technical writer assess an existing procedure, clarify it and its related standards, and then document it, the company benefits by the improvement (or, in certain instances, outright removal) of ambiguous, outdated, or conflicting processes. The clarification of a procedure can lead to a significant freeing up of resources and involved parties.

The second involves technical documentation as a proactive measure. Once the procedure is properly documented, training incoming team members on the new procedure minimizes the possibility of the earlier mistakes being repeated. It also dovetails with the business ideal of consistent quality assurance and improvement – with the procedure documented, should changes be needed in future to accommodate new policy, technology, departmental personnel, or responsibilities, the documentation clearly delineates the information to facilitate the changes.

Numerous studies have been conducted across several fields (including insurance, health care, IT, and manufacturing) establishing the corporate value of technical documentation; in virtually every instance, the companies that took advantage of the value of technical documentation saw benefits that far outweighed the expense of its creation.

How It Works

For example, an IT procedure (call it Procedure X) has the following metrics:

- 1) The initial procedure, which normally takes 15 minutes (assuming the employee makes \$15/hr) = \$3.75.
- 2) If, due to incomplete training, miscommunication, or mistakes, this process takes longer (assuming 30 minutes instead of 15), the procedure now costs the company \$7.50. It also reduces the employee’s daily productivity, continuing to add up if the error remains consistent.
- 3) Even if this only happened once per day, if the employee consistently takes 30 minutes instead of 15, assuming a 20-day work month (4 weeks, 5 days a week), the cost now amounts to \$75 per month.

- 4) If the department has 25 people, and all of them are taking 30 minutes on the procedure instead of 15, even if it only happened once a day, the cost now equals \$1,875 per month, or \$22,500 per year.

For a once-a-day mistake that 'only' takes an extra 15 minutes.

The example above does not even take into account what the delayed productivity costs the company.

To counteract this consistent mistake, a Technical Writer is brought in to document the procedure for the department. Using the example metrics above:

- 1) The Technical Writer spends an hour with the department manager interviewing him or her about the procedure (assuming the Technical Writer makes \$25/hr and the Manager makes \$50/hr) = \$75.
- 2) The Writer then documents the procedure, clarifying all of the steps, and spelling out the exact standards that are to be met for the procedure (estimating 80 hours for writing, revising, editing, and research) = \$2,000.
- 3) The new documentation is used to train the existing employees (1 hour training session) in the department (25 employees at \$15/hr, the manager at \$50/hr) = \$425.

Cost for solving the problem and preventing it by incorporating it into future training = \$2,500.

Using this example, the company saves just over twenty thousand dollars per year by investing in technical documentation. (The actual figure would probably be higher, considering that the loss of productivity has most likely cost the company in other ways.)

Even for departments that are not currently dealing with 'problem issues,' the commissioning of documentation is still valuable in that it supports the ideal of 'responsibility' – by defining the exact roles involved in the procedure, should problems arise, management can use the documentation to assess the situation and determine exactly where the problem is occurring. As such, rather than wasting numerous man-hours tracking down the problem, management can go through the procedure, confirm each step is being followed, and thus arrive at the problem in far less time.

Company and Departmental Commitment

Documentation is only valuable when it is actually used. It does a company no good to commission the creation of technical documentation and then ignore it. If a procedure has documentation in place, but it is not being used, then either:

- a) The documentation is inadequate to the task for which it was written, or
- b) The department or company is not taking advantage of the documentation.

Under these circumstances, it is in the company's best interest for the management to investigate why the documentation is not being used, and take steps to rectify the issue (whether through the creation of more accurate/appropriate documentation, or updating training methods to involve the use of the documentation).

Technical documentation is, fundamentally, a two-fold investment. A company intending to take advantage of technical documentation will also need to take a close look at the procedures already in place, to determine exactly what documentation can do to improve those procedures.

Determining the Need for Technical Documentation

Metrics that can be used to measure the value of documentation include:

- Customer satisfaction scoring
- Time spent on task
- Time spent correcting errors
- Financial expenditure
- Productivity (such as projects completed)

Management would work with Quality Assurance (or, if the company employs one, a performance/productivity analyst) to determine and implement metrics such as these. Once the analysis is complete, the Documentation team would join the process and begin the task of documenting the procedure in question. The documentation process involves a number of steps:

- Research – By studying the metrics from the analysis, the Technical Writer can address these issues in the documentation through discussion with the management (see Interviewing).
- Interviewing – By speaking to the management (and sometimes the employees involved), the Technical Writer clarifies exactly what the procedure entails. This step is by far the most important.
- Creating/Editing – The Technical Writer re-creates the procedure in documentation, with examples, screenshots, step-by-step processes, and then sends it back to Management for confirmation. This step is repeated as often as necessary, but a good Interview session can eliminate the need for multiple editing sessions.
- Publication – Once the documentation is approved, it is provided to the Management, who can then use it with the intent of addressing the problems determined by the earlier metrics.

Conclusion

The return on investment (ROI) of technical documentation, when used to address metrics such as the ones above, quickly becomes clear. Documenting a procedure reduces miscommunication, ambiguity, and conflicts of information. It serves as a training benefit, a reference tool, and a guide for future procedures and documentation related to its initial source. Given the financial and productivity returns on its proper use, technical documentation can be one of the most potent assets for a company.

Further Reading

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