

# Dealing with a Scourge of Infrastructure Management

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What might this be? Unreasonable users constantly changing their requirements? Suppliers charging outrageous rates to fix faulty software or hardware? No, this type of scourge is far more insidious and is something many IT professionals avoid like a plague. Read on to learn what this is and how to deal with it.

The duties of IT professionals sometimes include a number of unappealing tasks such as late night calls, last minute changes to test schedules, unreasonable customer requests, and weekend upgrades. These relatively minor annoyances pale in comparison, however, to one of the most unappealing scourges of all: process documentation. In the frequently heard words of a typical IT analyst, "I've just spent months planning, testing and now implementing this process. You mean you want me to document it as well?"

The reluctance to document is understandable. Highly knowledgeable IT personnel usually excel more in technical skills than those of writing. Some view writing as a less important, periphery part of their job. Others may see documentation as beneath them. Many struggle with how to determine the true quality and value of the documentation they are generating. The following describes how IT analysts can effectively make these determinations, and in the process transform a potential scourge into a possible blessing.

## Evaluating Process Documentation

An important aspect of any process is the documentation that accompanies it. Many shops develop excellent processes but fail to document them adequately. After an initially successful implementation of the process, many of these procedures become unused due to lack of documentation, particularly as new staff members who are unfamiliar with the process attempt to use it.

Some documentation is usually better than none at all, but adding value and quality to it increases the likelihood of the proper use of the process it describes. Evaluating the quality of documentation can easily become a very subjective activity. Few techniques exist to objectively quantify the quality and value of process documentation. That is why the following methodology is so unique and beneficial. We developed this approach over several years while working with many clients who were struggling with ways to determine both the quality and the value of their process documentation.

The purpose of evaluating the *quality* of content is to show to what degree the material is suitable for use. The purpose of evaluating its *value* is to show how important the documentation is to the support of the process and how important the process is to the support of the business. The quality of the content of documentation is evaluated with 10 common characteristics of usability. Each of these is described below.

1. **Ownership**—This characteristic rates the degree to which the three key ownership roles—process owner, documentation custodian, and technical writer—are clearly identified, understood, and supported. For some processes, the same individual may have all three roles. In most cases the documentation custodian maintains the process documentation and reports to the process owner.
2. **Readability**—This characteristic rates the clarity and simplicity of the written documentation. Items evaluated include the use of common words, terms, and phrases; correct spelling; proper use of grammar; and minimal use of acronyms, along with explanations of those that are used but not widely known. This characteristic especially looks at how well the level of the material matches the skill and experience level of the audience.
3. **Accuracy**—This characteristic rates the technical accuracy of the material.
4. **Thoroughness**—This characteristic rates how well the documentation has succeeded in including all relevant information.
5. **Format**—This characteristic rates the overall organization of the material; how easy it is to follow; how well it keeps a consistent level of technical depth; to what degree it is documenting and describing an actual process rather than merely duplicating tables, spreadsheets, and metrics.
6. **Accessibility**—This characteristic rates the ease or difficulty of accessibility.
7. **Currency**—This characteristic rates to what degree the current version of the documentation is up to date and the frequency with which it is kept current.
8. **Ease of Update**—This characteristic rates the relative ease or difficulty with which the documentation can be updated, including revision dates and distribution of new versions.
9. **Effectiveness**—This characteristic rates the overall usability of the documentation including the use of appropriate examples, graphics, color coding, use on multiple platforms, and compliance with existing standards if available.
10. **Accountability**—This characteristic rates to what degree the documentation is being read, understood, and effectively used; all appropriate users are identified and held accountable for proper use of the documentation.

These ten characteristics are intended to cover a broad spectrum of quality attributes to make them applicable to a wide variety of different types of documentation. The value of the documentation to the environment for which it was intended is evaluated next using five common characteristics. Each of these is described below.

1. **Criticality of the Process**—This characteristic describes how critical the process is described by this documentation is to the successful business of the company.

2. **Frequency of Use**—This characteristic describes how frequently the documentation is used or referenced.
3. **Number of Users**—This characteristic describes the approximate number of personnel who will likely want or need to use this documentation.
4. **Variety of Users**—This characteristic describes the variety of different functional areas or skill levels of personnel who will likely use this documentation.
5. **Impact of Nonuse**—This characteristic describes the level of adverse impact that is likely to occur if the documentation is not used properly.

Each characteristic for both quality and value can be rated on a 0 to 3 scale based on the degree to which elements of each characteristic were met. The ratings are defined as follows:

- 3—All aspects of the characteristic have been met or are present.
- 2—A significant, though not entire, portion of the characteristic has been met or is present.
- 1—A small portion of the characteristic has been met.
- 0—None or an insignificant amount of the characteristic has been met.

Using this rating system against the ten attributes of quality and five characteristics of value enables virtually any type of documentation within your infrastructure to be evaluated. The maximum *quality* rating for any piece evaluated is 30 and the maximum *value* rating is 15.

## **Benefits of the Methodology to Evaluate Process Documentation**

There are three major benefits to this method of documentation evaluation. The first is that it gives a snapshot of the quality of existing documentation at that point in time, particularly documentation of high value. If improvements are made to the material that result in new ratings, then they can be compared to the current rating.

The second benefit is that this method gives us the ability to customize the criteria for quality and value of documentation to reflect changes in priority, strategy, or direction. In this way the methodology remains applicable regardless of the specific criteria used. The third benefit of this method is that it allows comparisons between different types of processes within an infrastructure using the same standard of measure.

Once both the quality and value characteristics are evaluated, the two sets of attributes can be shown on a quality/value matrix as depicted below. Quality ratings are shown along the horizontal axis numerically increasing to the right from 0 to 30. Value ratings are shown along the vertical axis numerically increasing as it ascends from 0 to 15. Each axis is scaled from the lowest quality and value ratings up to the maximum possible. The benefit of such a matrix is that it depicts both the value and quality of each piece of documentation on a single chart.

The matrix is then divided into four quadrants. Points in the upper-right quadrant (1) represent documentation that is both high in value and high in quality. This is the desired place to be and constitutes excellent documentation that requires little or no improvements and only periodic reviews to ensure continued high quality. Points in the lower-right quadrant (2) signify material that is high in quality but of a lower value to a particular infrastructure. Documentation in this area is generally rated as good but could be improved.

The lower-left quadrant (3) represents documentation that is relatively low in both value and quality. Material in this area is designated as only fair and needs to be

High Value	Quadrant 4  <i>Poor</i>  Urgent Need to Improve	Quadrant 1  <i>Excellent</i>  Periodic Review Recommended
R A T I N G	Quadrant 3  <i>Fair</i>  Review & Improve as Time Permits	Quadrant 2  <i>Good</i>  Minimal Review Required
	QUALITY RATING	
Low Value	Low Quality	High Quality

improved in quality. Since the value is low, improvements are suggested on a time-permitting basis. Points in the upper-left quadrant (4) indicate documentation that is high in value but low in quality. Documentation in this area is considered to be at the greatest risk since it represents material that is of particular importance to this organization but is of poor quality. Documentation in this quarter of the matrix should be improved as soon as possible to prevent adverse impact to processes, procedures, and services.

Several of our clients have evaluated dozens of key pieces of their infrastructure documentation and then graphed the results on a matrix of this kind. The matrix became a powerful tool since it identified instantly which pieces of documentation – those falling in the fourth quadrant – needed to be addresses most urgently. Managers and analysts both benefit from this identification. Rather than issuing a blanket statement that large amounts of documentation need to be generated, managers can direct analysts to initially concentrate on those pieces that have the lowest quality and highest value to the company. This method of evaluating the quality and value of documentation can make the task of improving it more appealing to IT analysts and less of a scourge.