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Empirical Pragmatic Testing

Documentation Model.

An extensible QA focused documentation model for the Test Team

Discussion Document
By Mark Crowther, Empirical Pragmatic Tester

1.0 Overview

A key element to any system intended to manage the definition, measurement and improvement of quality practices is its documentation. This Quality System (QS) documentation needs to be produced and used in a consistent way in order to help ensure the QS achieves it intended objectives. This consistency allows expectations to be set and ensures an understanding of what information will be required, captured and shared over time. In addition it becomes possible to measure ongoing trends and performance and then to make measurable improvements to quality practices.

Producing and using QS documents in a consistent way therefor requires a rationale approach and this Guideline Document provides a model for that approach. The types of documentation required, conventions for naming and identification are discussed for the documents forming the QA documentation set. This Discussion Document doesn't provide complete detail about Quality Management Systems (QMS) within which this documentation set would be a part.

2.0 QA Documentation Model

2.1 Definition and Control

All documentation is intended to provide definition and control for activities that directly or significantly indirectly affect product quality. Producing documents for the sake of documenting quality activities is not the objective of a QS, any documents:

- Must add value to the activities they cover and help make product quality more certain.
- Must provide "Just Enough Definition – Just Enough Control" and no more.
- Should be associated in some way to process and practice within the QS.

2.2 Types of documentation

The QA documentation set has three tiers, two of which form part of a standard QMS.

- **Operational Procedures**
  The First Tier documents are the definitions of activities, the things that people do when they work. By detailing how to perform these test activities they naturally create step by step procedures. Having these work activities defined means they can be communicated and understood more easily and will be done in a consistent way by everyone.

- **Controlled Documents (Templates)**
  The Second Tier of documents are the records created when performing the activities defined in operating procedures. For example if a procedure describes the need to test requirements, you need somewhere to record what your test approach will be.

- **Guidance Documents**
  The Third Tier of documents provide general guidance on areas such as best working practice in QA, explanations of techniques or methods and knowledge capture or discussion on areas of software testing and quality. These are used in conjunction with Operating Procedures and the completion of Controlled Documents but do not have the level of formality associated with those documents.

3.0 Identification, Naming and Versioning

Identification, naming and versioning of documents using a non systematic approach typically leads to incorrect references, unclear ownership and documents that can't be clearly identified between others. To reduce these risks all documents within the QS must be:

- Unambiguously identifiable even when referenced in abstract.
- Identifiable by document Type and Owner.
- Under version control.

3.1 Identification

Each document is given a three-part unique reference made up of:

- A two letter Document Type reference:
  - **OP**: Operating Procedure
  - **CD**: Controlled Document
  - **GD**: Guidance Document

- A two to three letter Departmental Reference:
  - **QA**: Quality Assurance:

- A three digit sequential Numerical Reference:
  - **001**: The first in the set
  - **002**: The second in the set
  - etc.

Each documents unique identifier will therefor be along the lines of:

- **OP-QA-001**: This would be an Operational Procedure, belonging to the Quality Assurance department and the first one of the procedural documents issued.

3.2 Naming

A descriptive name should be given to the document that indicates the subject matter, for example:

- **QA Documentation Model**

3.3 Versioning

Versions of documents should be readily identifiable and the reader should have a clear idea as to the level of change as indicated by the version:

- When the document is first drafted for review fractional numbers should be used: **0.1**, **0.2**, etc.
- At first issue the document version should be: **1.0**
- If minor updates are added to the document that don't change either the sections within it or the overall direction or focus of the documents content then versions should be: **1.1**, **1.2**, etc.
- Where new sections are added or a revision of the document changes the direction or focus of the content then the version should be shown as: **2.0**, **3.0**, etc.

4.0 Conclusion

With the model applied to all documents in the QS there will be reduced ambiguity and increased clarity of both definition and understanding around what type of document it is, who owns it and what information it contains and to what revision. Conversely the reader will be in doubt as to what the document isn't. By way of example our model will produce something similar to:

(GD-QA-001) QA Documentation Model – v1.0 which is clearly the first release of a Guidance Document from the Quality Assurance team detailing the model they apply to documentation.