



# Executive Guide to Evaluating Requirements Quality

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## EXECUTIVE SUMMARY

Requirements quality is tangible. It is possible to look at the specific characteristics of requirements documentation and determine if it is sufficiently clear, accurate and complete to lead to a successful project. Since flawed requirements trigger about 70% of all project failures,<sup>1</sup> this paper will present some hard and fast rules for looking at requirements documents, in any format, and being able to determine if they are reasonably well constructed. It will outline the key points to look for in a requirements document, and why this can save a company hundreds of thousands of dollars. Finally, it will offer five straightforward questions to address when evaluating requirements quality. The paper is not intended to be a full audit of requirements, but rather act as a guide and checklist for evaluation.

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<sup>1</sup> Business Analysis Benchmark 2009, IAG Consulting

## 5 QUESTIONS FOR EVALUATING BUSINESS REQUIREMENTS QUALITY

### Question 1: Is the structure of requirements reasonable?

High quality business requirements should not be overly technical or complicated. Good requirements start with the *context of the business and its processes* and address what the business is trying to achieve, rather than focusing on *how* the goals will be accomplished. For example, in dealing with something as complex as customer order management, it is necessary to break it down into steps like “receive a call from a customer.” That is the first step in the process. For each and every step there should also be a high-level description that must also include detail for associated process steps. Each of those process steps should be detailed enough that it is easy to extract from them how information moves among stakeholders and the systems within the enterprise.

Great requirements are all about great process - not about the document itself. If the process for getting the requirements is poor, it is likely the document will be poor. If the process is excellent, it is likely the document will be excellent

It is the gap between ‘how’ the existing systems or processes function, and ‘what’ is desired after automation is completed that becomes your requirements. These structured statements of system capability, or more properly, ‘well formed requirements statements,’ are designed for ease of use by the technology organization.

In evaluating requirements, the first step, then, is to look at your documentation and determine if it includes these logical components. Good business requirements are not just about being well organized - they are ultimately about ‘what’ the business intends to accomplish. That means that anything associated with a quality set of business requirements needs to be very tightly connected with the business process itself or there will be a lack of cohesion.

### Requirements Quality Checklist:

- ☐ The requirements document is not overly technical or complicated
- ☐ The requirements document starts with the context of the business and its processes
- ☐ The process is broken down into steps
- ☐ Each step includes a high-level description
- ☐ Process steps are detailed enough that it is easy to extract how information moves among stakeholders and the systems within the enterprise
- ☐ Care was taken in the production of the document

## Question 2: Did they define the data needed?

There are two basic elements associated with this that can be used to evaluate requirements quality. Firstly, determine whether care was taken in the production of the document. If proper care was not taken, it is likely the document lacks definition in key places, such as 'customer.' If an entity, such as 'customer', is not properly defined the requirements might be based on the wrong information altogether. This will have consequences as the project moves forward and probably will not be discovered until the late testing stages. At that point trying to fix it will be expensive and time consuming.

Second, if the process description is not reasonably detailed the organization's analysts will not only be describing customer, but how attributes like their address or social security number are used by the business process.

Searching for detail in requirements documentation is critical to evaluating overall quality. It should not, however, take hours – a simple scan should provide enough insight.

- ☐ There is a consistent use of terms
- ☐ The relationship of entities are defined

### Question 3: Are the interdependencies documented?

The next critical piece is to determine if interdependencies are being documented. The implementation of any major system is like throwing a rock into a pond. Each ripple that results from that action must be tracked to determine the impact on the business function as a whole. If this information is not captured there will surely be a problem.

Firstly, is there a section for interdependencies? Secondly, look for an issues list. If the team is using effective cross functional meetings to do elicit requirements, a ton of issues should emerge. A lot of these issues are interdependencies associated with business functions, projects, systems, etc. If this list does not exist, be suspicious about how information in the requirements document was captured. Third, look for a context diagram. This type of picture shows the interaction of the business processes with every external entity involved with it. Each line in the chart is interdependency. It is important to understand the project's interdependencies up front or the project might end up being re-worked.

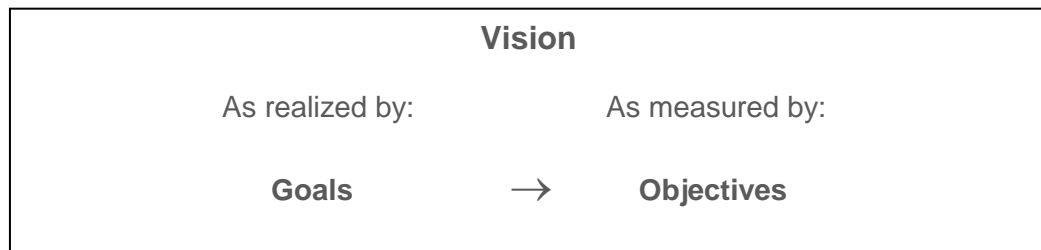
Becoming a high  
(requirements)  
maturity organization  
means taking control  
of the requirements  
practice and creating  
a focused plan of  
action

- ☐ There is a section for interdependencies
- ☐ There is an issues list
- ☐ The document contains a context diagram

#### Question 4: What's the quality of the objectives?

The fourth step in evaluating requirements is to look at the quality of objectives. Are the goals evolving efficiently over the course of developing requirements? Rather than simply making sure that goals are being stated, make sure that they are being *future stated* correctly. Be sure that objectives are actually SMART - Specific, Measurable, Achievable, Relevant, and Time-bound. If there is not progression in subsequent iterations of documentation, there is a problem.

This is vital because these objectives will be the basis of some hard decisions on feature-function, cost-time tradeoffs downstream in a project. If the objectives are not clear it will simply be very difficult to make these tradeoffs.



- ☐ The structure of vision, goals, and objectives fits the above model and is properly documented
- ☐ Goals and objectives are future stated
- ☐ Objectives are SMART (Specific, Measurable, Attainable, Relevant, Time-bound)

### Question 5: Was the process for getting the requirements efficient for stakeholders?

The fifth element of evaluating requirements quality is that great requirements are all about process - not about the document itself. If the process for getting the requirements is extremely painful, there is likely something wrong and that will increase the probability of failure. Was the process for getting the requirements strong? Was consensus reached quickly and efficiently? If the answer to either question is 'No' there are major issues lurking under the surface that need to be resolved. Great requirements come from great process. It is absolutely reasonable to expect that the executive team will be pleased with participating in that process.

To implement, the organization must focus on broad-based education which includes explaining what improved requirements means for executives

- ☐ The process for getting the requirements was strong
- ☐ Consensus was reached quickly



## CLOSING THOUGHTS

Poor requirements trigger about 70% of all project failures.<sup>2</sup> Re-working projects, adding functionality, or fixing small details in the late stages is both expensive and time consuming. Keeping a diligent eye on the quality of requirements documentation, therefore, can save an organization a significant amount of money. For example, if an audit of a \$3,000,000.00 project exposed poor documentation and fixed it, the cost savings would be roughly \$630,000.00, while at the same time delivering over 27% more functionality to the business. Failed requirements are poor requirements quality. Those projects with poor requirements quality will cost about 187% more, on average, than was initially planned.<sup>3</sup>

Many people understand that requirements are critical to the success of projects, but do not necessarily take effective action to correct that problem. The issues described in this paper are the sort of things that lead to 200% budget overruns. Surely that number is significant enough to prompt action. Do not accept failure for a project when it can, in fact, be corrected.

## ABOUT IAG CONSULTING

IAG specializes in business and software requirements. Since 1997, our company has worked with 300 of the Fortune 1000 companies, completed over 1,300 requirements projects, and trained more than 100,000 business analysis professionals. Our organization focuses on a practical and practiced approach that is efficient for all stakeholders in both business professional and information technology departments. We bring measurable gains to our clients:

- Reducing time needed to complete requirements
- Ensuring completeness in documentation and reducing change requests
- Issuing RFPs where vendors can bid accurately and clients get better terms
- Reducing costs in systems development
- Salvaging troubled projects

### CONTACTING AN IAG CONSULTING SPECIALIST

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<sup>2</sup> Business Analysis Benchmark 2009, IAG Consulting  
<sup>3</sup> Business Analysis Benchmark, 2009. IAG Consulting