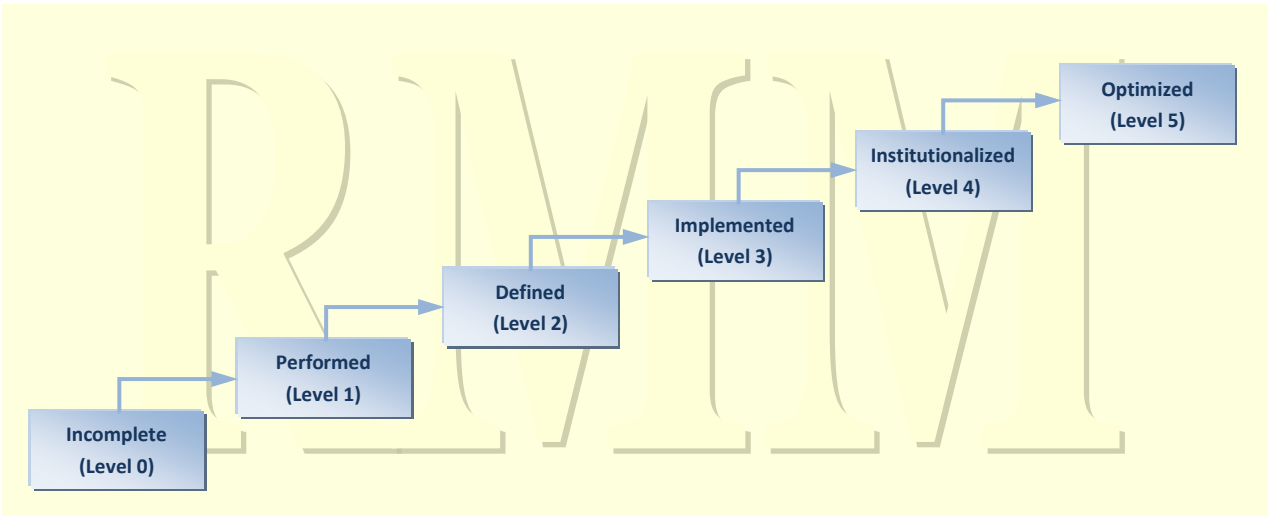# IAG CONSULTING

*The **Requirements** Experts*

Understanding the Levels of the
Requirements Maturity Model

ABSTRACT

The purpose of this paper is to describe the observational characteristics of the six levels of the Requirements Maturity Model (RMM). The RMM provides a formal methodology to measure the relative level of an organization's business analysis (BA) discipline and associated maturity in requirements definition and management (RDM).

An organization progresses to the next level of maturity as goals are achieved and thresholds are surpassed. Each level of maturity shifts focus or emphasis on different requirement practice characteristics, and builds a foundation for succeeding levels.

INTRODUCTION

The RMM is a staged maturity model similar to those used by several standard-setting bodies. It is designed specifically for organizations to apply to the business analysis discipline.

The RMM has six defined levels, with key characteristics as described on the following pages.

- Level 0: Incomplete
- Level 1: Performed
- Level 2: Defined
- Level 3: Implemented
- Level 4: Institutionalized
- Level 5: Optimizing

It uniquely integrates capability measurements across the following six areas that relate to the discovery, description, and documentation of requirements:

- Process
- Practices & Techniques
- Deliverables
- Technology
- Organization
- Staff Competency

The level of maturity in an organization is determined through an assessment performed by a certified RMM consultant. This guide and other tools are provided by IAG, the developer of the RMM, to enable an organization to approximate its maturity level. A formal assessment may also be undertaken for a more accurate and specific analysis.

In addition to providing a maturity level for each capability area, the RMM can be used to understand the organization's maturity by process/knowledge area, by department/individual, and by essential characteristics such as level and quality of definition, management, performance, adoption, and results. A formal Requirement Maturity Model Assessment (RMMA) also includes a comprehensive report that identifies an organization's strengths, as well as its areas of required focus and provides a road map for improving to the next maturity level.

LEVEL 0: INCOMPLETE

The practice of business analysis essentially does not exist. The client's needs or requirements are neither elicited nor documented on projects.

PROCESS

There is no definition of requirements related processes. There are no standards, guidelines, policies or rules established for requirements definition and management activities.

PRACTICES AND TECHNIQUES

There are no business analysis methods defined for use in the organization. Any techniques that might be used for authoring, modeling or managing requirements would be fairly basic and usually driven by the experience or skills of individual analysts.

DELIVERABLES

An organization with a requirements maturity level of zero does not produce standalone requirements documentation. There are no templates, guidelines or examples provided for requirements work products. Requirement artifacts, if produced at all, are blended with project and system design documents.

TECHNOLOGY

The organization does not provide any tools to support the elicitation, capturing, modeling or management of business requirements.

ORGANIZATION

Organizational oversight and direction to the discipline of business analysis is absent. There is no sharing of best practices or collaboration in the organization. No training in business analysis or requirements definition is offered by the organization.

STAFF COMPETENCY

The average level of knowledge, skill and ability of those who might be performing business analysis activities is generally poor. There is little, if any, understanding of the fundamental concepts of requirements definition and management within the organization. Results, even from the best performers, would be considered poor and far below industry expectations for a business analyst.

LEVEL 1: PERFORMED

Requirement activities are not defined across the organization, resulting in unpredictable, poorly controlled, and inconsistent results. There may be areas within the organization that use industry or locally developed best practices, but there is no organizational direction or oversight.

PROCESS

The manner in which requirements are obtained and managed is informal and inconsistently followed. Requirements may be gathered and even documented on some projects, though standards are loosely defined and vary between different units in the organization.

PRACTICES AND TECHNIQUES

Select industry best practices are used in some requirements analysis activities. Practices and techniques may be consistent at a team level only. Practices are inconsistently applied and results are not repeatable.

DELIVERABLES

At a level one, basic template(s) are available and are used on some projects. There are no uniform standards defined for requirement deliverables across the organization. The quality of deliverables that are produced is moderately acceptable, typically inconsistent across projects, and likely does not follow industry best practices.

TECHNOLOGY

For requirements authoring, word processing and spreadsheets are the typical tools of the Business Analyst or Project Manager. Specialized requirements modeling and management software is never or only rarely used.

ORGANIZATION

The organization may provide some support for business analysis practices. Training is offered to analysts but not specific to the requirements practice. Roles and standards for business analysis, requirements definition and management may be only partially defined or not defined at all.

STAFF COMPETENCY

The majority of individuals assigned to perform requirement activities have a fundamental knowledge of most core concepts and skills. Collectively, the level of knowledge, skills and ability of the business analysis practitioners is just barely acceptable. Consequently, good quality results may be achieved only occasionally by the top performers.

LEVEL 2: DEFINED

Formal definitions for the business analysis practice are introduced along with the provision of select standards. Although requirement activities are defined, and may be fully understood, there is inconsistency in the application of the practice across the organization.

PROCESS

Almost all of the activities in the requirements process are well defined with clear dependencies, input, and output expectations. Detailed task-level policies, procedures and rules are defined for the critical activities of requirements scope definition, requirements planning, and requirements elicitation. A defined end-to-end process is followed on many of the projects with requirements elicitation and documentation performed on all projects.

PRACTICES AND TECHNIQUES

Most of the business analysis methods applied in the organization have defined guidelines and standards for use including process and data modeling techniques as well as procedures for review, verification and validation. There is training available to cover all of the critical best practices, and basic guidelines for all standard methodologies used. Use of the practices and techniques are not mandated and vary by project.

DELIVERABLES

Templates, guidelines, basic examples and training for all requirements related work products are published and available. Standardized templates and forms are usually used on all projects and the quality and level of satisfaction is generally acceptable to good. Because the use of standards is not enforced, deliverables tend to vary significantly by project.

TECHNOLOGY

The organization provides some specialized software tools for requirements authoring, modeling, collaboration and management, and they are beginning to be used on some, or even many, projects.

ORGANIZATION

Goals and objectives have been defined for a requirements or business analysis function within the organization. Basic roles and responsibilities are defined. Training for BA's is provided. Standards, guidelines, rules and some basic measures for the performance of RDM and project tasks have been established. There is still only moderate support for business analysis and requirements in the organization requiring strong leadership, communication and plans for realizing the stated vision.

STAFF COMPETENCY

Most analysts assigned to perform requirements activities have a fairly good knowledge and comprehension of all necessary competencies covering business analysis, requirements definition, and requirements management.

LEVEL 3: IMPLEMENTED

The business analysis practice is refined and begins to be more universally applied across the overall organization. The process also starts to become more integrated with project management (PM), enterprise architecture (EA) and application lifecycle management (ALM) processes and frameworks. Standard deliverables are produced, often with the support of requirements-specific tools. An organization has been established and standards are managed centrally and routinely audited.

PROCESS

The end-to-end requirements definition and management process has been fully defined with complete detailed task-level policies, procedures, rules and guidelines. Essential aspects of the RDM process are aligned with PM, EA and ALM frameworks and processes though they are not yet fully integrated. Measurements of quality and effectiveness of the process have begun to be implemented and results are very good.

PRACTICES AND TECHNIQUES

Detailed guidelines and advanced training exists for most of the RDM techniques and methodologies used. Usage of the selected practices is now mandated. A majority of projects comply with defined practice and technique standards.

DELIVERABLES

Detailed and comprehensive templates exist for requirements artifacts. Exemplars and checklists are defined for all required documents. Use of standardized templates is now mandated and, consequently, mostly used. Deliverables are selectively audited to defined standards and quality is very good to excellent.

TECHNOLOGY

Specialized requirements authoring, modeling and management tools are encouraged and used on most projects. There are basic guides and training for all the tools and detailed guidelines and support for the most critical aspects of the software.

ORGANIZATION

A formal organization has been established with responsibility for business analysis standards, resource development, and governance. A vision, mission, goals and objectives have been written for the organization. Detailed roles and responsibilities have been established. There is a defined set of measures of performance, quality, and satisfaction for requirements definition and management.

STAFF COMPETENCY

Most analysts assigned to perform requirement activity tasks have a good knowledge with demonstrated application of the organization specific competencies in the end-to-end requirements process and satisfactory results are usually achieved.

LEVEL 4: INSTITUTIONALIZED

The requirements process fully integrates with any organizational application development or project management methodologies and architectural frameworks. Standard processes and practices are followed consistently. The Organization routinely measures the results of all projects and obtains good results.

PROCESS

The requirements process is fully integrated with PM, ALM, EA and any other processes or frameworks. Measurements of compliance, effort, and effectiveness are applied to requirement processes on a regularly scheduled basis. The process is consistently followed on essentially all projects.

PRACTICES AND TECHNIQUES

Guidelines and rules for the performance of RDM practices are mandated, measured, and managed. Detailed guidelines for all standard techniques and methodologies are supported with advanced training. The effectiveness of requirements techniques is measured and compared against industry benchmarks. The results show that the quality and productivity of the requirements practices used is excellent.

DELIVERABLES

Documentation, QA standards, and procedures are managed and measured. Standardized templates for requirements artifacts are consistently used, quality of the resulting work products is excellent, and consequently good project results (budget, time, requirements) are consistently achieved.

TECHNOLOGY

Specialized requirements authoring, modeling and management tools are consistently used on all required projects. There are detailed guidelines and training for all the tools used. The software is integrated with enterprise architecture, project and application lifecycle solutions.

ORGANIZATION

A formal business analysis organization measures and manages to strategically aligned goals and detailed objectives, and there is strong, quality management and organization support given to the practice of requirements definition and management.

STAFF COMPETENCY

Good results from business analysis, RDM efforts are consistently achieved. Most Business Analysts have a solid knowledge of the organizational requirement process, practices, policies, and procedures, with very good skills and the ability to consistently apply them on projects.

LEVEL 5: OPTIMIZING

With very strong management and organizational support, the organization is continually optimizing its RDM processes, methods, systems, infrastructure and resources. Results are exceptional but being progressively improved.

PROCESS

The process is continuously updated based on measurements of effectiveness and compliance. Updates are also introduced to include new industry best practices, to ensure continued alignment with related processes and to address updates in enterprise strategy.

PRACTICES AND TECHNIQUES

Standards, guidelines, and rules for the performance of RDM practices are measured, managed, and continuously improved, resulting in exceptional quality, performance, and outcomes.

DELIVERABLES

As a result of ongoing management, measurements, and improvements, the quality of requirements work products with respect to their conformance to standards, level of stakeholder satisfaction, and value added benefit to the organization is considered excellent.

TECHNOLOGY

The use of specialized RDM software functionality is managed and being continuously and more fully enhanced, integrated, augmented, and upgraded to improve its utility and value to the organization.

ORGANIZATION

The business analysis / requirements management organization is being continuously improved based on on-going performance management and organizational development efforts. There is excellent management and organization-wide support and exceptional overall results based on scorecard metrics and industry benchmarks.

STAFF COMPETENCY

Most Business Analysts have an advanced level of proficiency that enables them to analyze, synthesize, and evaluate over and above standard knowledge, comprehension, and ability. Collectively, the skills and ability of practitioners is excellent and good results are consistently achieved across all projects.