

## A SUMMARY VISION OF PRADO - PM MATURITY MODEL

The maturity model used for this research was Prado-PMMM which affirms five maturity levels, as shown in Figure 1. Inter-level evolution occurs considering six dimensions: Managerial Knowledge, Methodology Application, use of Information Technology, Organizational Structure, Efficient Human Relationships and Strategic Alignment.

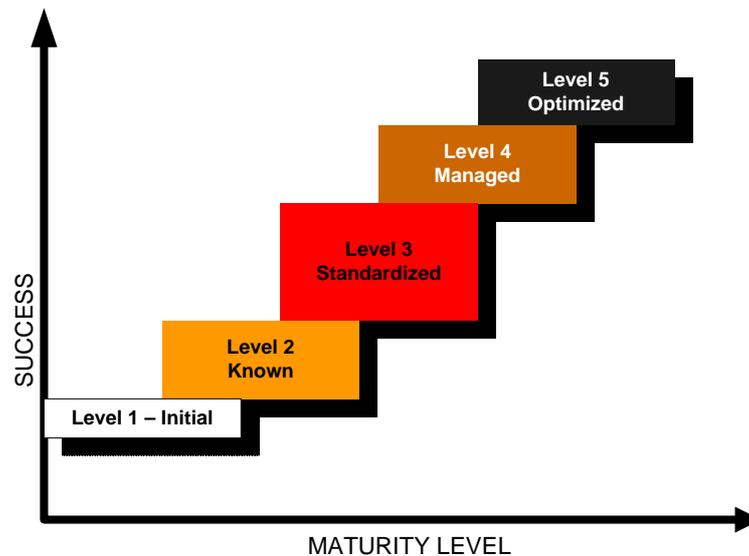


Figure 1: Prado-PM Maturity levels.

Prado-PMMM model was developed from 1998 to 2002 and published in December 2002. It is based on the author's project management experience in various Brazilian organizations. This model allows the assessment of the maturity of a department (or area) of a firm, such as information technology, building, new products development, etc. Its conception criteria are:

- Use of Carnegie Mellon University SW-CMM levels structure, with small change in the titles.
- Simplicity: based on a survey with forty questions.
- Universality: adaptable to any project category.
- Evaluation of a department's characteristics related to its ability on successful project execution.

A summary of level characteristics is shown below:

**Level 1 – Initial, embryonic or *ad hoc*:** the organization is at the early project management stages, which are conducted with improvisation or through individual efforts. Usually, there is no work planning and correspondent follow-up. There are no standardized procedures either; success depends on "good luck" (imponderable factors) or individual effort. Significant possibilities of delays, expenses beyond those budgeted and differences from technical specifications (if present and documented) exist.

**Level 2 – Known:** the organization invested constantly in project management training / education and specific software. Isolated attempts of procedure standardization can occur, but with restrict usage. The need for planning and control is perceived and, in some isolated initiatives, quality improvement is noticeable. For the rest of the efforts, failures are still being detected.

**Level 3** – Defined or standardized: Procedure standardization was proposed, published and is being used, under the leadership and support from a Project Management Office (PMO). Methodology is available and is practiced by all staff members involved, being partially automated by specific software. An adequate organizational structure is defined and implemented, according to real possibilities and different project types. Basic tools are applied in fundamental ways. Commitment from the internal partners should be obtained. Planning and control processes are consistent and continuous learning improves them as new projects are planned and executed. Remarkable quality results are noticed.

**Level 4** – Managed: Processes are consolidated and the model has been improved through analysis over data collected from projects in execution. This allows the assessment of the causes of deviation from original project goals and how countermeasures has been defined and applied. A continuous improvement cycle technique is employed when a deficiency is perceived. Some statistical tools, such as Pareto Analysis, are in use. Organizational structure was reviewed and modified to allow efficient relationship among involved departments (eventually project-oriented structure, matricial or strong / centralized). Projects are aligned with the organization business. Managers are improving their abilities on critical project management aspects, such as human relationships, conflict solving, negotiations, etc. The application of project management processes is acknowledged as a success factor for the projects.

**Level 5** – Optimized: The project execution is optimized using the vast experience and also personal knowledge and attitude (discipline, leadership, etc). Optimization means better results, such as time and cost reduction and quality gain. It also means improvement on management processes, frequently implying in simplifications and unnecessary bureaucracy reduction, bringing benefits for project managers and their teams. With such optimization, sophisticated tools are applied by the Project Management Office, as Value analysis, Statistical analysis, Critical chain, etc. New project definition can also be helped by a “best practices” database. Success rate is close to 100%. The organization relies faithfully on their professionals and takes high-risk challenges.