The following characterizations of the five maturity levels highlight the primary process changes made at each level:

1) **Initial**  
The software process is characterized as ad hoc, and occasionally even chaotic. Few processes are defined, and success depends on individual effort.
The Five Levels of Software Process Maturity

2) *Repeatability*  Basic project management processes are established to track cost, schedule, and functionality. The necessary process discipline is in place to repeat earlier successes on projects with similar applications.

3) *Defined*  The software process for both management and engineering activities is documented, standardized, and integrated into a standard software process for the organization. All projects use an approved, tailored version of the organization's standard software process for developing and maintaining software.

4) *Managed*  Detailed measures of the software process and product quality are collected. Both the software process and products are quantitatively understood and controlled.

5) *Optimizing*  Continuous process improvement is enabled by quantitative feedback from the process and from piloting innovative ideas and technologies.