



# Using the CMMI®

Peter Leeson

## Demonstrations of success

There are many published success stories of CMMI implementation but few give the metrics we want. There is a simple reason for the absence of data at this level: low maturity organizations do not measure their cost of quality; if you do not have measurements of what it was like before, how can you measure the change?

The data published on the success of CMMI falls into two categories: generalized, anonymous data and incidental data from a particular context:

- Generalized data state that some company has measured a return on investment of 880% for the CMMI based process improvement, no information on how this was measured.
- Incidental data are available from a number of organizations. They show a reduction in rework, or the increase in productivity.

Both these groups of data present serious problems. Statistics based on hidden data are not trustworthy as far as I am concerned. Incidental data do not mean the same solution will work for me.

## Successful usage of the model

Companies throughout the world have successfully implemented the CMMI and used it as guide for their process improvement efforts. One of the key factors that they have in common is that they have focused primarily on doing what is right for the company rather than doing what the model recommends.



By understanding their organization's quality needs, they have sought to use the model as a guide, often in parallel to other approaches that offered different aspects of quality improvement, such as ISO 9000, ITIL, Six Sigma or Prince2. The combination of approaches allows them to determine what is the most successful and useful section and aspect of each one of these models and techniques. The resulting approach allows them to better understand and implement activities that will focus on their customers' needs.

I have personally witnessed the same results in organizations throughout the world, having personally worked with organizations in Ireland, UK, Belgium, France, Germany, Poland... all the way to China. I have seen the same effects in organizations of several thousand engineers as in one that had four engineers. This can be done, because the model does not require you to do anything or document anything. It asks to see evidence that basic engineering activities have been done. In addition, it asks that these activities be performed in accordance with the business needs and objectives.

Using the model correctly involves a high level of education of management and engineers, seeking primarily to help them understand why this is relevant to them and the cultural aspects of the change rather than only the technical side.

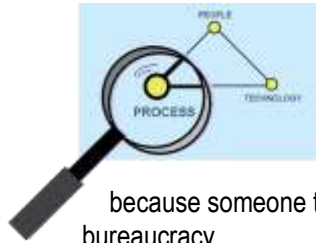
## Failed usage of the model

Many have tried the CMMI and failed hopelessly. This is frequently because they have not had the correct level of understanding before starting. They do not understand the purpose of a company policy or the estimating of project parameters.

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As a result, they create a bureaucracy, a lot of documentation and fail. This results in a feeling that the model is not useful and is not appropriate for organizations “like ours”.

## Conclusion



“Every man is given the key to heaven; the same key will open the doors of hell”

If it is used to forward your business, the CMMI is a powerful tool that can help you improve significantly. If it is used to get a rating for advertising purposes or do it

because someone talked you into “doing CMMI”, you will create a nightmare bureaucracy.

The purpose of CMMI is to facilitate process improvement. Improvement means making your ways better, not throwing them out and replacing them with some theoretical set of practices and templates. Do not buy processes: improve those that work for you. Do not invent new ways, you are already doing great things within your organization, what you need to do is learn from your failures, so that you can repeat your successes. The CMMI will point out the things you should consider.

For more information, see <http://www.qpit.ltd.uk>, <http://www.sei.cmu.edu/cmmi>. Author can be contacted at [Peter@qpit.ltd.uk](mailto:Peter@qpit.ltd.uk).