There is little disagreement within the software community about the need for addressing process improvement within small businesses and projects. Small businesses in the software industry represent a significant amount of the resources applied to software problems around the world. These businesses sometimes plan on staying small, but often they hope that they will grow with success. Particularly for those who plan on growing, understanding how processes that are well-conceived, described, and used can contribute to their success in the business world is critical to attain and sustain competitiveness.

As important as this is, small businesses often find there are many more “urgent” concerns that claim their attention. This is exacerbated by the perception that defining, training, and following disciplined processes is too much work in comparison to the benefit today. Because small businesses are so often worried about day-to-day survival, thinking about how processes can help them tomorrow is often at the bottom of their priority list. Not to mention, small software companies rarely have the internal expertise and resources to perform process definition and improvement activities themselves. This means added cost that is rarely considered in the survival-level business plan.

Governments across the world have taken note of these challenges for the small businesses within their economies and have instituted a variety of approaches to encourage and support their small software businesses in taking process improvement seriously. One of the most ambitious of these government initiatives is Mexico’s MoProSoft initiative. This initiative built a national norm (in the U.S., it would be called a standard) that is explicitly targeted at the pequeña (tiny) software organizations in Mexico. The MoProSoft team looked not only at the process topics covered in other common international standards and guides, but they also identified the need in these small organizations to deal explicitly with business strategy issues, a unique contribution to the process improvement community. It is one of the several techniques that Hanna Oktaba and Mario Piattini have included in this volume.

MoProSoft does not intend to replace more widely used process improvement standards like ISO 9001 or CMMI. However, it does fill a gap for those organizations that are ready for “some” type of improvement, but that are still sufficiently taken up with business survival issues that they do not feel ready to take on the more prominent standards fully. In my conversations with Hanna and other authors of the norm, it is clear that their dedication to encouraging productive improvement activities in organizations that normally would not engage in improvement is a goal that they hold dear. This book covers both the challenges that led to solutions like MoProSoft as well as other productive approaches to improving processes in small settings.

If you are in an organization trying to approach improvement with limited resources and few people, you will find useful guidance and experience reports in this book. If you are working with small organizations who are reluctant to try process improvement, you will find some ammunition for encouraging those organizations to think more seriously about process improvement. If you are working with frameworks like CMMI or ISO 9001, you will find ideas on ways you might adapt your implementation to account
for some of the issues commonly present with the smaller organizations you work with. In any case, we all have much to learn from both the successes and the struggles of small organizations working to adopt improved processes that are provided here.

SuZ Garcia is a senior member of the technical staff at the Software Engineering Institute of Carnegie Mellon University in Pittsburgh, PA, USA. She currently works in the Integrating SW Intensive Systems initiative. Her research in this area is focused on creating processes, tools and techniques to support complex systems of systems engineering. From June 2001 to Oct 2006, she worked in the technology transition research area, with 3 of those years focused specifically on transition support of process improvement for small settings. From Nov 1997-May 2001, she was the Deployments Manager for Aimware, Incorporated’s US customers, focusing on using technology to accelerate organizational improvement. The 5 years prior to this were spent at the SEI working in various capacities on all the Capability Maturity Models the Institute was involved in. She spent the previous 12 years in multiple improvement-related roles at Lockheed Missle and Space Co. She is co-author of CMMI Survival Guide: Just Enough Process Improvement, a book that focuses on the skills and practices needed to establish and support process improvement programs in small and other constrained-resource settings. Education: BA, Ergonomics, 1980 from University of California, Santa Barbara; MS, Systems Management, 1988 from University of Southern California.