

Putting the Pieces in Place

Melissa Mutkoski has worked where tools were tossed as soon as the product changed, where automation was a targeted effort, and where companies were caught off guard due to preconceived notions about how to automate. Put simply, Melissa Mutkoski has seen it all.

Today, Mutkoski oversees automation at Formation Systems, Inc., a company that essentially markets automation. At Formation, she says, the goal is basically to "Automate everything!" While this is a noble pursuit, the challenge lies in the fact that—marketing aside—automation never actually saves time or money. Though it allows you to perform many tests in a short time, thereby significantly enhancing productivity, it also requires you to spend time creating, maintaining, and interpreting the automated test suite. And so it goes that automation is truly an investment in *quality*.

"For those that are just getting started this can be problematic," Mutkoski explains. "As a software manager, you're aware that the financial powers-that-be often view automation as a one-time expense—the purchase and implementation of the tool. When they see you coming back for maintenance money, it can become a tangle."

Other advice she gives to managers approaching automation is to hire a lead architect before making decisions about what tool to buy and what kinds of resources to devote. It's critical that managers select someone who has had lots of experience and can focus in on the issues related to automation. But finding the person with just the right mix of experience for this job won't be easy. Mutkoski says the profile for this perfect person might look like this:

- **Programming experience.** This is more important than specialized experience in any one tool.
- **QA background.** Ideally, but not necessarily, in test automation.
- **Destructive tendencies.** The ideal person has to have a history of liking to break things.

"It's hard to find people with this hybrid skill set," says Mutkoski. "But what you need is someone who can write code for hours, then know how to test the heck out of something to find the bugs."

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The next step is building the right team. "We created a separate team for automation," Mutkoski states. "Then we developed an infrastructure, coding standards, and things they could re-use." She smiles. "We built a serious automation foundation." Mutkoski also claims that any time you have a separate automation team with serious object-oriented programming skills, you're ahead of the game.

In the end, the key to successful automation is clear—lots of planning ahead. The important thing to remember is that in the case of automation, test automation *is* a software development function. With this in mind, Mutkoski advises, it's up to you to take steps to ensure that your automation projects get the right architect, the right tool, and the right team. —A.S.