

# testing experience

June 2012

The Magazine for Professional Testers

printed in Germany

print version 8,0

free digital version

ww.testingexperience.co

SSN 1866-5705

Test Center of Excellence

How can it be set up?



# Critical Success Factors for a Test Center of Excellence

by Erik van Veenendaal

The theme of this issue of testing experience makes me think back on an assignment I did a few years ago at an organization that developed highly complex multidisciplinary safety critical systems. It was probably the most successful organization I have been involved in when it comes to setting up a test center of excellence and implementing test improvements. On a recent flight back home, I relaxed and tried to analyze what really made the difference. Many things came to my mind, but there are probably four essential success factors that I want to share with the readers. As always, trying to improve or manage an organization using just a top-down approach doesn't work. A combination of top-down and bottom-up is usually most successful. During my analysis, I came up with two top-down and two bottom-up critical success factors.

### Top-down approach

### **Test policy**

A test policy, if well written and with the right level of detail, provides direction on the improvements, states the values of the testing organization, shows how testing adds value to the overall business objectives and defines some key test performance indicators. Not without reason does the TMMi model have "Test Policy and Test Strategy" as one of its main process areas already at maturity level 2. At this company the test policy was established in a way that policies are intended (!), and thus provide added value. It was written on one page only, well distributed and put on walls, e.g., near the coffee machine and copier, to ensure everyone was aware of it. On a yearly basis, once the business policy was re-discussed and agreed, the test policy was re-discussed in a brown paper session with managers and all test managers. Are the values still correct? What are the main problems we encounter? What should we focus on this year? How do we add value to business? These are examples of questions that were discussed in the session, with the result being documented in an updated test policy.

### Leadership

Whenever I have been really successful in my career, there has almost always been a manager that made the difference. I recall many names of managers that immediately come to mind when thinking of successful projects. Somehow it is sad that success

should depend on one person only, but on the other hand real leadership makes the difference. Leadership has been described as the "process of social influence in which one person can enlist the aid and support of others in the accomplishment of a common task". Also in this organization, I encountered a real leader. Someone with a strong personality, who was there for his people when things got rough, who was able to motivate them when needed, who had a vision toward the future of the company and the role of testing, but also, and probably above all, a pleasant, honest human being with integrity. Leadership is much more than providing resources. Real leaders just make the difference, find them!

### **Bottom-up approach**

### The test managers' meeting

One of the things I learned from Watts Humphrey many years ago is that critical stakeholders during change management are those directly responsible for the project, e.g., the project manager and test manager. They tend to be directly confronted with delays due to new and innovative processes, while their job is to deliver a quality product on time. Thus they are usually not too enthusiastic when it comes to process improvements to their projects. At this company, although a person was assigned as a process improvement facilitator, the test managers' meeting was the main driver of any improvement. At their weekly meeting they would discuss, in addition to (test) project issues, improvement ideas, the status of improvement actions, etc. They were the ones to decide whether an improvement had added value or not, making it very practical, and also with a strong focus on added value in projects using the test policy as their reference framework. When a decision was made to define and implement an improvement action, a volunteer was sought amongst the test managers that would drive the specific action. Note that the improvement actions were not process oriented only, but also concerned tasks like seting up and organizing a training session, tool selection, developing a supporting Excel template, etc. As a result, little or no change management actions were required for the test manager, a typical difficult stakeholder. They were now in charge of doing things they perceived had added value to the projects, either short or long term.

### **Everyone involved**

Although the test managers were driving the improvements, they would not necessarily do it all themselves. Normally they would take the action back to their team, discuss it and make it a team assignment. In this way all testers became involved in building a high quality test organization and test improvement. There was almost no need for change management, it was already their test process. Of course implementation could still be difficult for many reasons, but at least there was little to no resistance and people had a positive mind-set towards the changes. Important in this context was also a monthly test knowledge sharing meeting where testers and test managers would present their personal experiences regarding a new template, test design technique, using a tool, etc. Again the test improvement coordinator was acting as a facilitator rather than a manager. A test process was being built that was already everyone's process.

You may notice that the critical success factors described above are strongly related to change management and people issues. I believe people do make the difference. A strive to become a testing center of excellence using just a process orientation will fail sooner or later. Real leadership, a clear policy, mission and direction, and a focus on change management and people issues can make it happen. But remember, changes do take time!

### > biography



### **Erik van Veenendaal**

(www.erikvanveenendaal. nl) is a leading international consultant and trainer, and a widely recognized expert in the area of software testing and quality management with over 20 years of practical testing experience. He is the founder of Improve Quality Services BV (www.improveqs. nl). He holds the EuroSTAR record, winning the best tuto-

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# Erik van Veenendaal

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