



TenStep Supplemental Paper

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Evaluate Your Organization's Use of Development Tools

If you are not familiar with development or have not had close contact for a number of years, it may surprise you to see the license and maintenance fees being paid by your company for development tools. Yes, you know of all of the desktop productivity tools and the major operating systems software used by your company. You may even know who the vendors are for the major databases you use. But do you know about the development tools?

The Purpose of Development Tools

There are many tools available to support all aspects of the development lifecycle. There are tools that help in planning, analysis, process and data modeling, design, programming, testing, and deployment. There are also many other tools that exploit development niches. These tools serve two main purposes. First, they help automate development processes that would be almost impossible to control manually. For instance, if you are developing a complex application with hundreds of requirements, a tool can help keep track of everything, including the dependencies between the requirements and the different types of data that are required. If your business applications must undergo maniacal testing for bugs and compatibility with prior versions, you will need automated testing tools with regression testing capabilities.

The second benefit of development tools is that they help establish and maintain consistent development processes across the organization. For instance, source code management software enforces consistent library structures, naming conventions, check in / check out processes, and program integrity. If you find that you have various departments or projects performing development in different ways, the use of common tools and processes will help to standardize the environment.

Large Development Shops Need More Tools

Since development tools help in managing higher levels of complexity and enforcing standard processes, it should not surprise you that the larger your development organization, the more tools it will need. I worked for a large company that had dozens of development tools. Some were utilized in all areas, while some were acquired to help only a small number of projects with specific characteristics. I have also worked for a smaller company that did not have many tools for uses other than programming. That company did not perform heavy development and so had no need for sophisticated analysis and design tools. When we were considering development tools, it was much more important to compare the cost of the tool in terms of the licensing cost, along with the incremental cost to utilize the tool, to the time required to perform the task manually. In a large organization, many of these tools are absolutely vital. In a smaller company, it is not always so clear.



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Don't Ignore These Tools – Rationalize Them

As you look at the development tools in your company, and their costs, make sure they are rationalized from an architectural perspective. Each one must solve one or more developmental requirements and you should have only one tool to perform a specific duty. With acquisitions and mergers, or a lack of internal control, it is possible that some of your development tools could overlap. For instance, if you have two tools for data modeling that perform the same functions, standardize into one to simplify the environment and reduce costs.

Summary

- There are many tools available to help automate and standardize all aspects of the development life cycle. Tools help manage large and complex development activities and help to enforce standard development processes.
- The larger and more complex your development organization is, the more tools you will need.

Your organization may be paying the licenses and maintenance fees for many development tools. It is important to understand the types of tools you have, their cost, and whether they are being fully utilized. If two or more tools overlap with the same purpose, standardize onto one. This will result in a simplification of the environment, more consistent standard processes, and a reduced cost to the organization.