

Systems integration

Keeping great new ideas from becoming outright failures **Interviewed by Jason Lloyd**

Systems integration projects have been a key initiative in IT for years, and organizations still can't seem to get it right with a high degree of success. We often read in the news about large IT projects that are dismal failures, and people wonder why millions of dollars were spent with nothing to show for it.

The process usually starts off as a great idea to build a new system to replace X, Y, and Z systems or to integrate these systems into one seamless system to meet a real business need. Key management becomes excited about the new system, a project is formed with proper support and funding, an implementation date is set, and then work begins on a project that "has a life of its own." Then delays begin to occur, requirements are scaled back, and costs skyrocket. After a while, the project is so large that it can't be canceled but it doesn't do what was originally promised.

So why do these things happen? Where did the systems integration and design fail? The original idea was good, it enjoyed endless funding and support, and it had teams of smart people working their lives away on it. There are so many resources, books and articles on "what to do to have a successful system integration project," adding another one doesn't make sense.

Smart Business spoke with Michael Wessler, technical manager and a consultant with Perpetual Technologies Inc., about some things to avoid, common pitfalls and warning signs with system integration.

What can a business do to mitigate the risk?

Start early, analyze well, and build a system and process architecture that makes sense with no-nonsense, proven technologies. Keep the focus on the goal of the project, not sustaining the project itself. The larger and more complex a project becomes, the more difficult this is.

Did you get the most impressive, well polished group of outside business con-



Michael Wessler

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sultants to define your new system requirements or did you use the inside people who actually know the system and its characteristics? Outside opinions and new ideas are critical, but make sure it is used in the right place.

Are you on the technology bleeding edge? If you are not working at NASA, then perhaps you should ask yourself why you are bleeding edge.

Two clichés are applicable here: 'projects can take on a life of their own' and people/projects 'can lose sight of the forest for the trees.' A large, long-running project can lose focus of delivering a useful end product. When it becomes more important to follow the rules than to do the job right and the next timeline or milestone is more important than the final objective, something has gone wrong. At this point management needs to say stop and refocus everyone on what's really important.

How can a business ensure its program and system subcomponents are all compatible?

Until the system has been subjected to a real, end to end test, you can't say for sure you have 100 percent compatibility. You have to put a system through its

paces to know what issues you will face. Today as larger vendors buy smaller vendors and repackage their code at a breakneck pace, no one can honestly say for sure that package X will perfectly interface with Y.

You can help yourself by using technologies you are already familiar with or can become familiar with. Be wary of any system or product that promises to do everything for you 'right out of the box' or 'with minimal configuration changes.' On the other hand, don't be afraid to use new architectures and technologies in place of antiquated software, but be sure that what you are moving toward will actually work as promised.

Why is it important for projects to have established procedures?

Well planned, documented, and followed processes and controls are absolutely essential to a systems integration project; otherwise you will have chaos. Many projects attempt to meet various configuration management milestones which are important. These are dynamic over time and need to be adjusted when it makes sense.

What is the appropriate way to test a system?

Structured testing cycles and test events are key. Develop realistic and comprehensive test plans and implement them. Make sure these are factored into the timeline of the project and are not sacrificed to meet a deadline. Often we see analysis and testing — which are the most critical stages of any project — get shortchanged because of lack of time. This can be a fatal flaw. Don't send a project on to the next level of testing until it is ready.

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