Extreme projects in today's hard times

by **Ed Yourdon**

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Several months before the beginning of the recent financial crisis, a clothing manufacturer contracted with a systems integrator (SI) to customize, implement, and install an ERP system. Pressure mounted and budgets were tightened after the financial crisis began — and despite long hours of intense overtime by both the SI and the end-users, the project fell behind schedule, and early versions of the system had far too many bugs and negative feedback from the end-users. The SI was eventually fired, and a new SI was hired to re-start the project — with even less time available to develop a working system. The new SI did not attempt to re-negotiate schedules and budgets, and did not have a different estimating approach. Instead, they relied entirely on "peopleware" techniques to dramatically improve the relationship between end-users and IT professionals, and used a systems development process that provided tangible evidence of progress on a frequent basis. This was an extreme situation demanding an extreme project management approach.

Extreme projects are defined as those whose critical "project parameters" (schedule, budget, personnel) are 50-100% more constrained than usual -- for example, an IT project that must be finished in half the "normal" amount of time, with only half as large a project budget, and with only half as many people (analysts, programmers, testers, etc.) as usual. Without a "miracle" (such as a dramatically more powerful programming language, or some kind of "silver bullet" technology, which usually doesn't exist), the only common strategy for succeeding with such projects is for everyone on the project team to work long hours of overtime, under enormous pressure, from the beginning to the end of the project.

Extreme projects have existed in the IT field at least since the mid-1960s, and probably long before that; unsurprisingly, they have a much higher failure rate than "normal" IT projects. Even worse, the project manager and key project team members are often "burned out" at the end of such projects, and they not only quit their jobs, but sometimes abandon their IT career for a less stressful profession.

High-pressure, high-risk, crisis-oriented projects characterized by long periods of extreme overtime are likely to be exacerbated by the difficult economic times that we are currently facing. The most common aspects of such recession-oriented projects are familiar to us all: a constant pressure to reduce costs, cut budgets, postpone or eliminate capital investments in new technology, along with layoffs, reductions in administrative support, smaller teams, and more "fragmented" teams, with people juggling multiple projects.

Some of the «normal» strategies for dealing with extreme projects — such as better negotiating techniques, or better estimating techniques — are unlikely to improve the situation significantly when the economy is bad. And some familiar strategies, such as «peopleware» approaches, need to be adjusted for the reality that there is less money for bonuses, and less interest from senior management to focus on improving the morale of their personnel. But some strategies, such as agile development methods, become even more important in bad times.

The practices of extreme project involve a combination of strategies, techniques, and guidelines -- of which "technology"-related solutions (e.g., better testing tools) are usually the *least* important. Instead, extreme project management focuses on more effective negotiations of realistic schedules, budgets, and personnel resources; better estimates of schedule, time, and effort; better "peopleware" practices to optimize the effectiveness of project teams; and better development processes (such as agile development methods).

One of the fundamental benefits of these practices is, quite simply, survival: finishing the project, and keeping the team intact so that they can work on more projects in the future. Of course, the other fundamental benefit is a much greater chance of finishing the project successfully: on time, under budget, without having to bring in additional project team members on an emergency basis.

Ed Yourdon is a computer software consultant and IT expert witness in his own firm, NODRUOY Inc., as well as co-founder of the Cutter Consortium, and Editor Emeritus of the *Cutter IT Journal*. He has worked in the software field for more than forty-five years, and has published 27 computer-related books and over 550 technical articles. Yourdon has programmed, designed, and tested numerous software applications and programmer-productivity products; has managed numerous projects as a first-level project leader and also as a senior IT executive; and has reviewed numerous software development projects for clients during his consulting career.

Ed Yourdon will summarize these strategies, and offer predictions for the future at the **6th International Athens Conference on Project Management Best Practices, on June 20,2011.**

He will also offer a 2 day training course on Extreme Project Management practices, on June 21-22, 2011 at the Hellenic American Union.

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