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# My Project Epiphany

BY SANJEEV GUPTA

Project management's importance first came to my attention in my previous job as chief executive officer of Thru-Put Technologies, a San Jose, Calif., USA-based scheduling and supply chain planning solutions provider. Our customers expected implementation to be fast and cost-effective, and our promise of consistently meeting aggressive deadlines was a key factor in their decision to select us over our competitors.

But projects, by definition, have high uncertainties. Requirements change. Vendors are late. Work goes slower than expected, and approvals are held up. Priorities change. Because of integration and resource dependencies, delays quickly propagate. Project dependencies also mean that local gains do not add up, and projects lose precious time on their critical path due to the cascade effect.

When all projects are running behind, people get pulled in multiple directions and start multitasking. We all understand that multitasking is bad (it stretches each task and reduces the productivity of people), but we do not fully appreciate the extent of the damage caused. If you consider that multitasking is most rampant in areas where resources are already constrained, and that multitasking is forced mostly on the critical paths of projects, you will realize that multitasking takes time and capacity away from where you need them the most.

At Thru-Put, to meet customer expectations, we had substantially increased the headcount without increasing our workload. Still, I was under constant pressure to add more capacity. My managers complained that they did not have enough time and capacity to do all these projects. Everybody seemed to be working extra hard. Yet, as a CEO, I could not understand where all the capacity was going. I was perplexed.

During this time, I came across Eliyahu Goldratt's *Critical Chain* [North River Press Publishing Corp., 1997] and its discussion of problems in projects. It made me realize that we were actually wasting substantial

time and capacity, and we could do much more with the same resources.

I decided to give Goldratt's advice a try and saw astonishing results. We were doing many more projects with the same resources. Our projects were delivered on time more than 95 percent of time. Pressure to add more capacity went down.

Uncertainties are unavoidable, but they can be stopped from multiplying and wreaking havoc, if one applies some common-sense logic such as critical chain thinking.

Project leaders and their sponsoring executives must build room for uncertainties in project plans with buffers to absorb and lessen the shocks of uncertainties. In a multi-project environment, instead of stacking projects

on top of each other, projects are staggered to contain delays, and new projects are started based on the availability of constraining resources.

During execution, consumption of buffers is monitored and used to calculate task priorities (across projects for shared resources). Tasks with the least amount

of buffer remaining ahead of them are given highest priority. Clear priorities curtail multitasking.

I have applied the same methodology as CEO of Realization Technologies. My company is consistently profitable, despite a downturn in the technology market. Our speed of innovation has helped us increase our revenues at a very healthy rate.

As I see it, project management is increasingly mission-critical and on the C-level executive agenda. For new product development organizations, shrinking life cycles require more projects, faster, with the same resources. Even areas such as IT consulting, where time and materials-based pricing mean little pressure for efficiency, customers now increasingly demand fixed pricing. Pressure for improving project management is building fast. I suspect that you will find your organization is not an exception. **PM**

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