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# A Cogent case study of the real potential cost of changing software methodologies

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*Beware of improvements to your product  
development process that might cost you more  
than you thought!*



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Our experience is your advantage

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## The problem

Cogent consultants were contacted by a publicly traded software company in distress. The prior year they had purchased a complete set of 'integrated' software development tools from a leading vendor. Their intention was to unify the development process across their several globally dispersed business units, some of which were only recently acquired. This was a major initiative which if successful, would allow the cost-effective corporate-wide sharing of common resources, management processes, development cycles, and ultimately personnel.

After successfully prototyping the new product development methodology in a small group trial, the core of the new development tool suite and project methodology was purchased and installed as a central resource – at a cost of over \$350K. A sampling of managers and technical leads received vendor training, and then sent back to their cubicles to create product. Fiscal constraints precluded the possibility that the vendor consultants could spend any significant time on-site learning the business and mentoring the leadership – and the vendor clearly did not want to become that entangled in the customer's business.

Left to their own devices, management's slow adoption of the tools and new methodology led to less than desired results. Some project managers unknowingly attempted to utilize every possible feature of the new environment, thinking that the documentation behind the process would sufficiently guide them. The result was that product development became hopelessly bogged down in detail and discussion. Other project managers bucked the trend and steadfastly refused to move from their entrenched methods. At the corporate level, the \$190K/year maintenance contract and increased inefficiency of operations was clearly becoming visible to the Board of Directors. Product release schedules were slipping, enhancements were not being delivered to critical customers, and product development costs were skyrocketing as product quality declined. Something had to be done to quickly assess the direction the company was taking, and bring product development back on track.

## What Cogent Minds discovered

Cogent consultants spent a period of three weeks assessing the situation and determining a possible set of remedial steps.

The most serious problem uncovered was a lack of executive empowerment to adopt the new methodology. Traced to a lack of understanding of the scope of the project, executives had neither budgeted for or anticipated the impact of such sweeping changes,, and therefore were dictating what the project *should* cost, rather than analyzing what it would take. Cogent consultants were able to explain, in their language, what this undertaking would cost and how to position the executives to be seen as facilitators of change, rather than dictators. This resulted in an immediate increase in credibility for the executive sponsors.

Cogent consultants discovered that there were serious shortcomings in basic project management skills due purely to a lack of experience. Technically excellent leaders were being promoted to positions of management responsibility without being prepared for the demands of their new supervisory, project management, and executive communication

roles. This is a common phenomenon in the software industry, particularly as companies find themselves in a rapid growth situation as was this one. Cogent consultants established themselves as trusted partners with the front line managers and delivered daily JIT mentoring on the issues confronting them. As a result, a new sense of reality emerged which led to better scaling of project proposals, and more effective communication at all levels. Better communication led to more realistic expectation-setting and increasingly predictable product delivery dates.

Overcoming adoption resistance to the new product development methodology required that the project be justified and repositioned with front-line managers and development leaders. This was accomplished through a deliberate campaign of education, technical training, and mentoring. As the leadership began to understand how the methods worked, and which processes to selectively adopt within their daily work patterns, product development began to accelerate, and quality became measurably better. This led to the creation of several types of development case which the managers were free to select, based on the requirements of the project, rather than attempting to make one large case fit all. Products which had taken 18 months to release were now going through 6 month life cycles, a significant market advantage for this technology.

## The cost of change

At the onset of the project, the client shared with us their cost-to-date of rolling out the new SDLC methodology and tools, as well as certain internal HR information. From this, Cogent was able to estimate that the loaded non-recurring engineering costs of the rollout were in the \$500-\$650K range, while the unloaded salaried impact of slipping ship dates for product was over \$70K/day. In an organization with over 350 developers and a dozen products this was clearly unacceptable.

Our consultants were able to provide JIT technical training and mentoring which was capped at \$350K over a 12 month period. With the product development cycles for a single 25 person group being shortened by nearly 12 months, there was a one year ROI on consulting dollars spent.

## Conclusion

Projects to unify software product life cycle methodologies are very high risk endeavors, and very costly. Mitigating the risks requires a broad and deep understanding of the technical and organizational challenges to the business. Unfortunately, in a modern world where enthusiasm is frequently seen as a substitute for experience, young managers find it difficult to anticipate the challenges and convey the appropriate messages across the corporation. When unrealistic expectations are then allowed to persist, the survival of the company can be at-stake.

Cogent was able to understand the organizational dynamics and technical requirements of this very risky project, and delivery of the solution resulted in shorter, more predictable product development cycles with increased quality and customer satisfaction. Just as importantly, it was done in a way that the customer could internalize and sustain into the future.