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LEVERAGE: GETTING RESULTS

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motd

Given our finite working life, the concept of leverage holds interest for those who wish to accomplish more things, to "get more done." In our careers as computer professionals, we see leverage and its application (or misapplication) continually.

The dictionary says that "leverage" is a synonym for both "effectiveness" and "power," and that feels about right to me. The whole computer industry revolves around paying a (presumably) low cost for an engine or machine that will amplify effectiveness for a person or group and supplementing the hardware with software that customizes that machine for a particular environment.

The airline reservations industry is a fabulous example of this approach. Imagine 10,000 people shuffling index cards that represent the availability of seats on the myriad airplanes flying every day for, say, the next year. That image is almost laughable. Nowadays, customers choose seating preferences and request special meals, in addition to seeing several dozen flight possibilities for their journey, with a minimal number of clicks. The power of databases coupled with the Internet and home computing engines enables this solution as the quickest, most accurate, and presumably cheapest. This is a great example of leveraging a computer and software to attack a problem.

Software is the medium by which computer leverage is conveyed. Software's creators intend to endow their users with specific skills or power. Their software tends to provide not only specific attacks (algorithms) on problems but also paradigms that offer useful approaches. The choice of a suitable computing environment can confer astounding leverage on folks who otherwise could never dream of attempting a complex solution.

Another kind of leverage is people leverage, commonly called management. Making the transition from enjoying personal accomplishments to enjoying the total set of accomplishments is a difficult one (or at least it was for me). "You didn't do anything but sit in your office," say the skeptics. Planning, encouragement, hiring, provisioning, and all the other myriad tasks are ignored by those who take them for granted. Nevertheless, it's easy to see that some people might feel pride of accomplishment in projects they champion, manage, and somehow move to completion. This is serious leverage.

Management leverage appears in a variety of situations and locales, ranging from large institutions like General Motors or Harvard University to smaller organizations like a church or a model railroading club. Each of these milieus offers a different kind of potential leverage and concomitant reward.

Another kind of leverage is seen more on the political front and is potentially exemplified in one way by the open source movement. In *increasing* order of degree of leverage, the open source promoters provide:

- software
- communication
- documentation and training
- advocacy

Why is advocacy the highest-leverage activity? Because it is the one that wins the hearts and minds of those who only then will use the other three to attack whatever problem is important to them.

This is not to say, of course, that advocacy for its own sake has a lot of value. Open-mindedness often trumps tunnel vision when trying to solve problems. What difference does all this make? It makes a difference if your personal motivators include concepts such as effectiveness, solution completion, and getting things done.

Thinking in terms of leverage means asking questions such as: "Is this a good way to spend my time?" "Will this action be as effective as [some other action]?" "If [Alice and Bob] do this, can I attack some issue or problem that they are unable or unwilling to attack?" Obviously, it also revolves around answering those questions with some level of usefulness.

I believe those who enjoy accomplishment may also enjoy leverage. It can lead to a tremendous amplification of personal skills and, best of all, make the world a better place. After all, that's the goal, isn't it?

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