your friends made a bundle while you continued in academia. But enough is enough. I want to live. Now."

"Judith, be realistic. The fact is that right now we cannot afford it. You know how much we borrowed. You know we can't afford a secondhand Subaru and you go out and buy a brand new Chevy Blazer?"

"Listen, Richard Silver," she put her hands on her hips. "I don't want to hear it anymore. I don't want you to tell me that we cannot afford it now, that we have to wait, that someday . . ."

"But, Judith," I try to calm her down, "that's life."

"Life! You dare to talk to me about life! I'm not going to listen to you anymore." She starts to cry. "I've listened once too often."

It hurts. Years ago I said "We cannot afford a child. Not now." A year ago Judith found out that she can no longer have children. I stand up and hug her. Hugs are lousy compensation. So is a new house. Or a Chevy Blazer.

Chapter 10

"Not bad for a first draft." Jim drops our article on my table. "I marked some of the points that need a little work."

The first page looks like it is suffering from a severe case of the measles. I glance at the rest. The disease has spread throughout all the pages. Even the tables are contaminated. I'm not surprised. That's what I expect from meticulous Jim. Sighing, I

"It's going to be a nice piece of work," he encourages me. "I put it back on the table. don't see much of a problem getting it past any editor."

"Can we expect to see it published before the end of this

"If we are lucky. But that's not the point. This article is going academic year?" to be published, for sure. What you need is many more. By the way, I've talked with Johnny about modeling the financial impact of project overdues."

"And?"

I'm quite surprised. It's not like Johnny. Since when is he declining the opportunity to develop a mathematical model?

Critical Chain

But knowing Jim's power of persuasion, there is no point trying to talk to Johnny myself. "So what are the options?" I ask, a little bit discouraged.

"You can wait until I find the time and stamina to do it. . . " Considering the fact that it isn't Jim's idea, it means waiting forever. "Or you can do the mathematical work yourself." No way. "It's as simple as that."

"There is a third alternative," I say. "I can come up with some new ideas."

"And give up on highlighting the financial impact of overdues? I don't understand you, Richard. You make so much fuss about the futility of most articles. If it weren't for the fact that I practically forced you to write some things with me, you wouldn't be published at all. At last you came up with some thing that even you consider practical, something that we can turn into not one, but two articles, and now you want to give it up? Just because you have to figure out the math?"

He examines my poker face, and almost disgusted, he adds, "Besides, where are you going to find good, new ideas."

"I have. Two."

He is on a roll. "Four years of complete drought and now, all of a sudden, I have to assume that you got a flood of inspiration? Will you please wake up."

"I have ideas for two important articles," I repeat.

"You have ideas for two articles?" He mockingly uses his little finger to clean his ear. "Say it again."

I keep a straight face.

"Let's hear them." Jim is skeptical, almost angry.

"With pleasure. But first, let me tell you where these inspirations are suddenly coming from. They are not my ideas; they are ideas that pop up in the brainstorming I'm doing with my

"Ahhh," his expression reveals that it makes sense to him. "Those type of ideas."

"What do you mean?" I'm somewhat offended. Never mind, he signals with his hand.

"The first idea," I start to explain, "revolves around the problem of early start versus late start."

"You? You want to deal with an optimization problem? And that's what you call an important article?" He stands up, and pacing, he tries to knock some sense into my skull. "Do you know how many articles have been written about it? The best mathematical brains in the field have been toying with the minute details for years, how can you expect . . ."

I'm counting. Five questions in a row. Jim is pretty impatient today. Finally, he notices my expression and stops. "You have an idea on how to approach it from a totally different angle!" he

When I confirm it, he starts to listen. I talk; he asks some speculates. relevant questions; I answer. He asks some more.

"Let me see if I understand you, Rick. Dozens, maybe hundreds of articles deal with the question of early start of a noncritical path versus late start. Regarding all these articles, in which tremendous efforts and brain power have been invested, you claim something very simple. You claim that it's all a waste

He pauses to allow me to speak. I open my mouth to answer, of time!" but what can I say? To say, "yes" is too arrogant, but I'm not

"You claim it," Jim speaks for me, "because you think that willing to give any other answer. they have concentrated on minor considerations and neglected

Before I have a chance to agree, he continues. "You claim that the major ones." the main thing is the ability of the project manager to focus. You further claim that both early start and late start jeopardize the ability to focus, even though to different degrees. And then, you conclude that ignoring it is ignoring the heart of the problem."

I open my mouth to explain why, but he doesn't wait. "As strange as it may sound, I agree with you. One hundred percent."

I close my mouth.

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"I went to all this length to show you that I do understand. Now let me tell you, I'm disappointed."

I'm tired of imitating a fish, so I keep quiet.

"Don't you see that this, how shall I call it, intriguing observation, is totally impractical?"

This is too much. Then I realize he is right. "As long as we are unable to recommend when to start each path, it does have limited practical use," I admit.

"You don't get it, do you?" Jim shakes his head.

Apparently I don't.

"Look Rick," he starts patiently, "you cannot describe focusing of a person by an equation."

"So?"

"So, this problem can't be solved mathematically."

I still don't get it. "But it can be solved logically," I insist. "We now know where to look. If we keep on thinking we might find a logical procedure. It will be immensely helpful for projects."

He is not convinced. I try harder. "Jim, I don't want to sound presumptuous, but I always dreamt of finding such a breakthrough. Something as powerful as Just-In-Time or TQM. They are not based on math, either. These methods are so robust because they are based on common sense, on logical procedures. I know we are still far from reaching the breakthrough, we don't have the answer. But at last we have identified the right problem. You must admit, it's a major step forward."

"It won't help," he sighs.

"You've lost me," I say sincerely.

"Rick, you entered the academic world over ten years ago. It's about time you knew the rules. If you want to move ahead you must publish, and to publish you have to conform to the accepted academic standards. You know the criteria for articles. They must be based on surveys or on mathematical models.

"But, Jim, what about things like JIT and TQM? According to what you say, they are not academic enough. Still, we teach them in every university."

"They've passed the test of reality."

"But what about new such breakthroughs?"

"If you find one, you can always publish it in a book. Books don't pass through the screening of academic reviewers. But remember, books don't count toward full professorship."

"I know all that. But it's ridiculous!"

"Jim, you yourself have said to me more than once that the knowledge in almost every aspect of organizations is far from being satisfactory. At the same time there is a whole army of people who are supposed to improve it. How many professors are there in business schools around the world? A hundred thousand? And what have we produced? Nothing. In the last thirty years knowledge has progressed in leaps and bounds. How many of those breakthroughs came from academia? Zilch. Don't you see that the criteria we use to judge what is acceptable research are the problem. They choke us. It's almost impossible to put any meaningful contribution through the system.

He raises his hand to stop me from continuing. "You may not How can we . . ." like it, I don't like it, but in order to prevent academic anarchy we all must adhere to the standards. It's like democracy or our legal system. They may suffer from major flaws but they are the best we have."

He glances at his watch. "What about your other idea?"

"Forget it," I say bitterly. "It's important for projects, very important. But it's impractical. It's not based on mathematical

"Still, I would like to hear it," he requests gently. models."

"What for?" Nevertheless, knowing that Jim has a particular interest in measurements, he published a book on them, I say, "It's about how we measure the progress of projects. The mea-

"How did you conclude that?" He is genuinely interested. surement is wrong."

"Yes, of course." And I quote from memory, "'Criteria num-"Did you use my criteria?"

ber one: Measurements should induce the parts to do what is good for the system as a whole.' Well, the way we measure the progress of a project, the measurement does almost the opposite.

"'Criteria number two: Measurements should direct managers to the point that needs their attention.' In projects the measurement steers the project leader away. It's ridiculous, it's damaging, and in my opinion, it often leads to the failure of major projects. But it's not important enough to be accepted as a respectable academic article."

He smiles at me and says softly, "You have to cool down. I suggest you go and speak with Johnny Fisher. He can help you."

"Yeah, sure." The last thing I need is another lecture on the importance of optimization techniques.

"It's not what you think," he responds to my expression. "Johnny was on sabbatical last year, but not at another university. He spent the year at UniCo."

"And using his mathematical skills he pretended to save that conglomerate a fortune. Good for him."

"Will you please stop announcing your views on business professors," Jim laughs. "Johnny learned a new method there. Something that, I'm sure, you'll find fascinating. It's all about constructing logical procedures. Exactly what you are looking for. Analysis based on cause-effect relationships, resolutions based on conflicts between necessary conditions, structured common sense, no mathematics."

What is he talking about? I don't really care.

"You don't care, huh? No problem. Just make sure you're at the next faculty colloquium. Johnny is giving it." Big deal.

Chapter 11

Rick is among the last to enter. To his surprise, the small auditorium is almost full. Probably the word went around that this colloquium was going to be different. Much different. Jim is waving at him. "I kept a seat for you." Now he won't be able to sneak out after fifteen minutes.

He has just sat down when Johnny Fisher starts. "I was sitting here watching this auditorium fill up, and I was thinking to myself, all these people came to see me. How flattering. I'm a celebrity. Then I realized, the Ph.D. students are here because they have to be. The professors are here out of courtesy. And all our important guests from industry came, not because of me, but because of the title of my presentation. Well, that's life."

Johnny leaves the podium and starts to pace the stage. "I was asked to talk about the new things I learned during my one-year sabbatical at UniCo. I must warn you, one year doesn't make one an expert. It is barely enough time to formulate some im-