

A futurist envisions industrial research and technology management 50 years hence

Management From A to Z: 2057

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OVERVIEW: Continuity and change will mark the rubbery boundaries of a manager's worklife 50 years from now. Information technologies will facilitate and improve the handling of such issues as education and training, while cultural elements in a globalized world will raise new problems. While American English will be the lingua franca, it will be far from the universal culture, which will demand new levels of managerial sophistication. The unionization of R&D managers will create new benefits, including sabbaticals, profit sharing on inventions and discoveries, and sophisticated training to keep up with new developments. Anonymous electronic voting on merit and credibility will guide relations with a firm's top management.

KEY CONCEPTS: continuity, change, skills maintenance, unionization, cross-cultural training.

Abby: It's good to see you, Zack. These 3D life-sized screens are marvelous. I could swear you are only ten feet away. Maybe later we can flip to the holographic mode and shake hands. I did want to get in touch with you to discuss a number of managerial issues and changes to see whether they are affecting your company and how you are responding.

Zack: Shoot.

Abby: We are trying a new rotation system which I know you have had some experience with. What we are doing started in think tanks, as you know, and moved quickly into corporate marketing and into planning, but my focus is on R&D. The issue is the rotation of managers. I am responsible for about 140 people. The managers I supervise are now being stressed by the rotation program. At anyone time, we need only about 12-15 folks in managerial functions. We've been rotating them. Rotation can be either for an individual project, running anywhere from one month to 15 or 16 months, or they can be strictly *ad hoc* activities in which the time could be as short as a week or as long as a year. The rotation is done not just to broaden the managers' experience, but to be a continuous test of their managerial skills.

Zack: We've done that and it has worked out extremely well. It was not just a matter of taking the group of managers as they existed and shuffling them around. We went to considerable trouble to test and evaluate the managerial potential of all of our then current and now present managers. As you know, for the past 50 years we have known on the basis of rather primitive testing—something back

then called the Myers-Briggs—that managers tend to move up in managerial responsibility because they have a great personal drive and capability to make decisions quickly. However, these same characteristics tend to isolate the manager from understanding the people under him or her, their differences, and how they do or will interact as a team.

Today, we have broadened testing and evaluation and have had great success. Decades ago they tended not to waste time; getting things done quickly was much in favor. One of the tools we have adopted is the critical incident technique. Coming out of work from, again, decades ago, it tests would-be managers for their ability to deal with complex, technical-personnel interfacial issues. Managing a technical team of about 12 people and the various technological choices that they have as they pursue their research or their development project is the core issue. The critical incident technique involves posing an artificial but realistic situation and then having the person describe how he or she would handle it. This is powerful in sorting out the person who has great technical judgmental strengths but from the point of view of work-related social interaction is a zero. In putting that all together, we have tremendously increased the competence of our rotating pool of managers.

Abby: Thanks a lot, Zack. If you can send me anything about that, I would appreciate it. It should give me a few references or maybe suggest a consultant. By the way, have you tried any of those robotized consultants with which you type in your problem, issue or concern and sign up for a fixed amount of time—5, 10, 15, or 45 minutes?

The automated managerial advisor gives you the best of its thinking by talking to you. We have great fun playing with it at our place. I'm not quite sure it is ever going to supercede living people, but it's a fun thing, particularly for the more junior staff and for the younger members of our managerial cohorts. One young fellow had a bad experience with it—he selected a mature male voice, and after a half hour “knew” it was his dead father, returned to help him.

Zack: No, never tried that, but with your recommendation, I'll give it a shot and shoot a few bucks on it.

Abby: You know, we have had the problem of communication for years. Among themselves, technical types are usually okay. But when we take them into the field face to face with customers it does not always work out well. Have you had any experience using the tools that you use with the managerial rotation scheme in selecting technical people to go out and interface with the customers? We, of course, always have them accompanied by a marketing person, but it would be nice if we could send them out unescorted, if we had enough confidence in their ability to interact effectively and bring back good stuff.

Zack: We had the same thought, Abby, and are in the midst of putting that into practice. We have not tried it yet with more than 4-5 technical people, who have not been accompanied by a marketing person. From that tiny sample, it looks like it is going to be a high-payoff activity, when we can send the technical people out on visits alone.

Abby: As I mentioned, I have a substantial number of people reporting to me and they are on five continents, and heaven knows how many languages they speak. If we added it all up for each of them, it must be close to 350 languages but, of course, English is the universal language. What we have not effectively dealt with yet is the question of cultural differences, We are still finding problems, particularly with the junior technical force from East Asia. Their cultures are so oriented toward seniority and humility toward aging that we have a problem of confidence in telling the researchers what we are looking for and what kind of answers we hope to get. We are fearful that they will work to tailor the answers in the direction they think will please us.

Zack: That Center of Cross-Cultural Learning, in Hawaii, has been very useful to us. We send all of our managers—the top managers have been sent as many as three times, as they move up the scale, to get the full cross-cultural story of the various countries we are involved with. We carry it so far that they spend their time in native costume; they play native games, including gambling; they drink native beverages—alcoholic or not; they eat exotic food. Some of them really have a problem being repelled by some of that, but they go through it.

What we are trying to do is immerse them in the cultures they are going to have to understand and deal with. There is nothing like living 24 hours a day for two days each in three different cultures. We have found that it is well worth the investment in managing people across the globe, some of whom you have never met at all. Many situations not only involve cross-cultural differences, but are compounded by individual differences.

Years ago, one of our top guys had a lot of trouble with indirection, confusing European and Asian indirection with evasiveness and yet, on the other hand, having his own attempts at indirection—that is, hinting rather than ordering—often ignored. I remember when Big Charlie was CEO back around 2032, he made a world tour of his responsibilities and wishing to be, to use an outmoded term, Mr. Nice Guy, never gave any orders, but when he saw something that needed attention, he would often use a phrase something like, “It would be nice if...” or “I look forward to when...”.

When he returned, the guy who was comically known as his Foreign Minister, because he had been giving him cross-cultural training, was hit with Charlie's observation that, “When I said this, or I said that, nothing happened. It has been six months and I see no results from the field. What do you make out of that?” His Foreign Minister replied, “It's very simple boss; when you said in your nice UK style, ‘It would be nice if’ and so on, they agreed with you completely, but they did not take that as an order. So you have left a lot of goodwill behind you around the world and have not motivated anyone to do anything new.”

Zack: I want to go back to the point earlier, Abby, about the new rotation of managers. One of the things we were able to pick up by having the staff evaluate the managers was how substantial the differences were in their managerial behavior.

The managers who scored the highest with the staff—and this, incidentally, was reflected in the performance of those teams—are those managers who spend the least time in face-to-face contact with the staff. It looks to me like that means that over-supervision, or in this case over-management, can lead to confusion.

Abby: I know your 28th year is coming up, Zack. What great plans do you and Lil have?

Zack: As you know, Lil is an anthropologist, so we divided my six-month sabbatical into three parts. In part one, she and I along with four friends are going by foot to trace out the exact route Pizarro used in the conquest of the Incas. The second part will be in refurbishing and enjoying our place outside Havana. It's in the mountains about 50 km from the city. We are uncertain about the third part but most likely we will spend it in Florence at the Uffuzi. We are both nuts about 12th to 16th century art. As an additional attraction, my brother-in-law has an apartment there we can use.

Abby: Can I come too?

Zack: Certainly. Bring work clothes!

Did you know I was just elected to the board of the Association of R and D Managers? That's the group that won for us in 2028 the right to organize and the seven-year sabbatical cycle with full pay. The strong commitment to continuing education in U.S. R&D-based companies also comes out of the trouble in the '20s when changing science and technology and too little in-service education was weakening corporate competitiveness and foolishly leading to too rapid advancement of the young, brilliant but jejune new hires. The turning point was the walkout by all (actually 87 percent) of the R&D managers in 13 of the largest firms. That lasted 27 days until management gave up on legal approaches and came to the negotiation table. In the early agreed-on package was profit sharing by team members in all commercialized inventions or trade secret products for 20 years, beginning two years after first sale of the product. Another surprisingly useful concession was that all executive presentations to staff were to be accompanied by anonymous electronic voting on credibility and merit.

The commitment to education is well illustrated by four-weeks-a-year college-level education for each R&D technical worker. Because of its unequivocal success, it was extended to all employees in 2042.

Seeing the benefits of continuing unconstrained education, the executive suite set a policy that no big R&D enterprise could begin until a useful number of executives and senior managers were adequately knowledgeable in the field. For example, when the company decided to go into ocean resources in a big way it spent \$180,000 at HARVMIT to get a tailor-made course for six top executives. In the trickle down to lower echelons I took the course two years ago.

Abby: Wow! I didn't know how all that started. What's on the union's agenda now?

Zack: First of all, It is a union for which the founders had to get special legislation, but as a psychological concession to the companies, they stuck with the original label, "association." I have no agenda. In talking with people directly and through the association's issues blog some important ideas will come up. If they don't, that's okay too. It means we managers and our employers are on the same wavelength.

Abby: Zack, It's been great talking with you. Thanks for your help and my regards to Lil.

Zack: Same here, Abby. Let's keep in touch.