

Diffusing Knowledge and Learning: Lessons from BP's Pacesetter Network

Humberto Vainieri, Robert Hanig, Rick Porter, Alan Thomas, and Paul Monus

One of the key dimensions of British Petroleum's (BP's) outstanding success over the past few years has been its commitment to demonstrating distinctive performance within its industry and beyond. This commitment led the company to not only improve the technical and structural aspects of its business and organization, but to explore the mindsets and improve the behaviors of its leaders and staff as well. The Pacesetter program included a significant focus in this area.

Linking refineries on six continents, the highly innovative BP Pacesetter program is a global infrastructure for generating and sharing knowledge and information for performance improvement, closely linked to BP's new governance structure for refineries. It provides a way for people throughout the BP system to build on one another's successes with change, learning, and quality initiatives. Each refinery chooses the depth and breadth of its involvement. In this roundtable, we hear from five people: Humberto Vainieri, Vice President at British Petroleum, architect of the Pacesetter program; Robert Hanig, the Innovation Associates consultant who helped develop Pacesetter's approach to organizational learning; Alan Thomas, business unit leader of Nerefco, the refinery in the Netherlands, and convener of the European peer group; Rick Porter, business unit leader at BP's Toledo, Ohio, refinery; and Paul Monus, one of the members of the Pacesetter coaches' team.

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Setting up the Pacesetter Networks

Humberto Vainieri: 1995 was a very bad year in the refining industry, with worldwide over-capacity. Our only viable alternative was to find a way to turn all our refineries into „pacesetters“—an industry standard term for the highest-performing plants. In a strategy session with the Executive Committee, we agreed to a concerted effort to change our working practices at the 14 refining sites that BP operated around the world. BP had already achieved some success with organizational learning in our exploration and production businesses, but this new program would take place at a much larger scale. The committee gave us approval in July 1996 and asked me to lead the Pacesetter project.

We started by convening the refinery managers in London. There was little buy-in for Pacesetter or for organizational learning. Yet the refinery managers all had a powerful incentive to be interested. Shortly before, there had been a major governance restructuring; instead of being cost centers, refineries would now be business units, with bottom-line responsibility for the returns on all their investments. They needed help making this transition, but they were also under such short-term financial pressure that it would have been easy for them to refuse any training or consultation we offered.

But they unanimously agreed that they wanted ownership of change efforts at their sites; they wanted to tailor and control them. This led to our proposal: for the first year, we would provide and pay for training, coaching, and consultation by request from the executive committee's central funds. If they didn't want it, that was fine; they would have to come up with their own ways of boosting performance. If they invited us, we would come to their facilities. Now I found myself in an uncomfortable position. The executive committee expected results, but I was not in control. I had to create pull, relying on the personal relationships that I had developed with the business unit leaders and on my ability to exercise influence. I visited each refinery with a presentation for the management team, hoping to break the ice.

Robert Hanig: Most of these sessions at the refineries were spent in conversation, working with the management teams to figure out their priorities. I think we gave an honest impression that: „We don't know for sure if this is the right thing to do. However, you do need to boost performance in some way. Let's find out together if this approach will work.“ We thus consciously emulated the kind of reflective, participative process that we were recommending. Our level of availability—we were ready to travel at short notice to any location—also showed our level of commitment.

Humberto Vainieri: There were three groups of people, all interrelated:

1. The core team was composed of two or three representatives from each refinery; they had to enroll not only their business unit managers, but also their peer groups. In effect, each site had its own core team. They all met together, once or twice a year, in a network to support each other.
2. The central support team consisted of the facilitators and internal consultants who were involved in training and other support.

3. The Global Refinery Network (GRN), composed of all the site managers from around the world, was a vehicle first for mutual support and gradually for governance. Managers at refineries are jointly accountable for their performance, and they use the GRN to keep each other aware of new approaches and to put pressure on one another. The GRN evolved into peer groups, which are now the core of the performance management process for refining and all of the other business sectors in BR

Paul Monus: Each site developed its own pilot projects. Some plants discovered that painting, cleaning, paving potholes, and making the equipment tidy was the highest-leverage action they could take. Others focused on the behavior of the supervisors as a group. And at other sites, such as Kwinana in Australia, they began looking systematically at the tension between the central control building and the rest of the refinery. (One factor turned out to be the physical distance of the various parts of the plant from one another.)

Robert Hanig: The GRN members wanted to get to know one another as a group of peers. So we met in situations where they could spend social time together. This began to enhance their level of communication, not only at their meetings, but also throughout the year. They agreed to always be available to one another, whether in a meeting or for visits and phone calls in between, so that they could behave more and more like a team of people, even though each had a separate refinery to lead.

The View from the Refineries

Alan Thomas: In 1996, within my first three months of being business unit leader, we decided to close two of our three sites. This was a considerable challenge: lay off 350 people, move three sites into one, and keep everybody in a reasonable frame of mind and looking forward. About that time, we got our offer to take part in Hum's Pacesetter project.

We applied the techniques and methods we learned from Pacesetter to our negotiations with the union and the Dutch Works Council. We closed the site approximately 12 months sooner than we'd hoped, without loss of business opportunity. We have found jobs for 140 people of the 200 that we laid off, and we continue to work with the remaining people to find suitable new jobs. We got agreement from the government to make voluntarily redundant a group of 90-odd people—no mean achievement in this part of the world. And we are commissioning a new hydrofiner that will come in 10 percent under budget and 6 weeks ahead of the original Pacesetter schedule. We haven't killed anyone, we haven't blown anything up, and we set the seeds for a positive commitment to the future, despite all those changes. I would say, we've had a bit of success.

Had we not had the Pacesetter infrastructure—both the training and the contact with other managers—we would have progressed toward the same goals at Nerefco. But we wouldn't have been aware of the techniques of organizational learning, and we would certainly not have spent as much time engaging the total organization in producing a vision. I think the process would have been a lot more difficult.

Rick Porter: Most needed, here at Toledo, was the idea of looking outside what we were doing—looking at other people's ideas and trying to incorporate the things that would work here. In the past, our culture never looked outside the refinery for ways to do things better. Instead, all the energy here was spent defending our current approaches. This is a truly high-tech refinery, and most of our people had tremendous levels of technical training and experience; they could not be replaced. They had to be induced to change themselves.

Many „silver bullet“ programs had been attempted in the past: culture change, reengineering, reorganization. I had to bring in something more fundamental. To make it work, the other senior leaders and I had to first earn some respect in order to get our people to listen to our ideas.

We billed Pacesetter as low-key training: „This is not a significant change; we're just going to give people new skills for the way they interact with people, or how they approach their job.“ Our management team went first. The union would not initially participate, because they assumed we wanted to increase productivity so we could cut jobs. We had to be explicit about our goals: to create a work environment that people would want to come to. Once the union started participating, they discovered that the reflection and inquiry tools are effective in managing meetings, and they are now using them. We now have a variety of teams using these tools, from shutdown teams to union committees, all setting examples.

Knowing that I'm one of BP's best experts on refinery operation, people find it hard to believe that I'm not going to give them the answers. But I try very hard not to. I tell people, „I don't run anything here. Give me some guidance on how I can help you be effective, and I'll do whatever I can, but it's your job, not mine.“ Obviously, if I see something done wrong that's significant, I will stop it. But in most cases, I'll let wrong answers occur for a while, as part of a process for developing the capability of the people.

Over the past four years, this refinery has sustained improvements of around \$100 million. Over the next couple of years, we hope to generate another \$70 million. Is it because of Pacesetter, per se? We don't care. We're in close enough touch with the organization that precise measurements about the Pacesetter program would be a hindrance.

The Five Key Success Factors of Pacesetter

Paul Monus: What would we actually measure if we wanted to know whether Pacesetter was making progress? These five domains of change seem like the most compelling factors:

- *Pull.* How many people are asking for help? How eager are they to pay for it beyond their established budget?
- *Spread.* What percentage of people has been exposed to concepts such as the learning disciplines—2 percent? Eight? Twenty? Forty? This measure doesn't tell whether people like the ideas or find them convincing, only that they have been exposed to them.
- *Internalization.* This is a measure of capacity development, gathered primarily through surveys and interviews. Someone might say, „I liked the idea of talking about assumptions, but I wasn't very graceful. I was like a bull in a china shop, and I made people angry.“ That person would score 2 or 3 on an internalization metric. To develop this metric, you need to give people a guide to different levels of proficiency, so they know how to score themselves.
- *Alignment.* Are people pulling in different directions or moving together? This can be measured through diagnostics: for instance, whether or not the site leadership team can agree on critical priorities. If disparate working teams start to blend into cross-functional teams, that's another sign of alignment.
- *Sustainability.* You know that a project is no longer „flavor of the month“ when you can count incidents of people incorporating new techniques into their work.

The Future of Pacesetter

Humberto Vainieri: At the end of 1997, Pacesetter became self-supporting; local sites had to pay for all costs, including training, themselves. In retrospect, we did not prepare people enough to manage this in a smooth way, and some training projects were abruptly cut. But the Pacesetter infrastructure does continue, the support remains enthusiastic, and the improvements have continued to be dramatic. In our first year, 1996, we barely exceeded our performance target; in 1997, we doubled it. Now, in 1998, we're averaging well above 20 cents per barrel improvement, which means more than \$120 million more profit.

Under the stress of the current weak economic environment, we will undoubtedly revert to old behaviors in some places. But by and large, our behavior under stress shows that we are a very different organization than we were three years ago. The Pacesetter project in itself is not spoken of as a project anymore; it is part of what we do. As refinery business units report their performance, they include a line item describing their Pacesetter improvements. The most important goal remains the same: to create an environment, systemwide, in which people make these improvements themselves.

This continues to become reality as a number of BP internal consultants and line managers have learned to apply the disciplines of systemic thinking, productive conversations, and shared visioning. This has made the critical lever of self-improvement more practical and effective in addressing the formidable challenges of performance improvement and cost reduction in today's oil industry. In fact over the period of 1996-1998, self-improvement alone is credited with improving profitability by more than 50 cents a barrel (greater than \$300 million per year over that period).

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Paul Menu (monuspa@bp.com) is Senior Project Manager, working currently on developing and implementing learning organization, system dynamics, and knowledge management processes for BP Amoco worldwide. He functions as an internal consultant—training/coaching local site leaders and their management teams, designing program rollouts, and bringing the ideas of the learning organization into practical use.