

# Harvesting Project Knowledge

BY NANCY M. DIXON AND KATRINA PUGH

“Every time we do something again, we should do it better than the last time” has become a familiar refrain. It means the knowledge gained from experience should be used to improve performance of the next similar task. Why doesn’t that happen as often as it should? For one thing, project teams don’t always understand what they’ve done right (or wrong). Teams are often unable to repeat their successes because they have little insight into what worked well the first time. Individual reflection is unlikely to arrive at a full understanding of the team’s work, with its multiple interwoven elements. Without time to reflect, teams may repeatedly make the same mistakes and carry them forward as members move on to other projects.



Even when a project team does analyze its processes successfully—maybe through an after-action review, or “hot wash”—the knowledge gained seldom gets to other teams that can use it. Many organizations struggle unsuccessfully to share valuable knowledge between projects. Little-used lessons learned databases and project reports that are filed and forgotten are familiar artifacts of these efforts.

We have developed a process we call “facilitated knowledge harvesting” that we have carried out in a number of organizations. This approach, piloted at a large semiconductor manufacturer, has helped the company speed knowledge collection and transmission and improved the likelihood that it gets productively reused.

The harvesting process involves five important steps (though, as the examples show, two steps may overlap or coincide to some extent):

1. **Select** projects for knowledge harvesting. The selection process is important because only projects that are likely to generate knowledge that can be profitably applied to other valuable projects can justify the investment of time and talent that harvesting requires.
2. **Plan** the harvest cycle from pre-work through capture and reuse. Planning involves both logistics and stakeholder identification. Who should be part of the harvest? When it comes to knowledge originators (those who have gained the knowledge through their work), it’s best to have deep subject-matter expertise and comprehensive knowledge across the project, or “big picture” people in the harvest. When it comes to seekers (those who could use the knowledge), the most obvious beneficiaries are a team preparing to do a similar task in a different context or teams encountering a similar context, even when their task is different.
3. **Discover and capture** valuable knowledge. This entails bringing together the knowledge originators and seekers either virtually or in the same room and facilitating a conversation that roughly follows the agenda developed during the plan. Importantly, the facilitator draws out both the seekers, who ask questions, and the knowledge originators. Reflection by the originating team is the first and most significant step in achieving reuse by other teams. Unless the originating team understands the basis for its own successes and failures, it will not be able to provide accurate, clear, and translatable lessons for others.
4. **Broker or transfer** the knowledge through systems and directly to seekers. Tag and publish the knowledge harvest documents in an appropriate knowledge repository. In a study of knowledge transaction costs, Prusak and Jacobson (2006) found that 38 percent of

these costs lie in simply eliciting knowledge from experts. Importantly, the harvest process involves facilitating connections between knowledge originators and seekers at the harvest as well as other potential reusers of the harvest insights who may not have been present during the event. These intentional connections greatly reduce time spent eliciting knowledge.

5. **Reuse** the knowledge. Teams engaged in similar tasks, or working in a similar context, use the knowledge to carry out their own work. Prusak and Jacobson found that 46 percent of knowledge transaction costs lie in adaptation, largely because knowledge was “thrown over the wall” with little context added. Knowledge harvesting encourages seekers to reuse the knowledge and help draw out the context from the knowledge originators. Even reusers who do not attend the harvest event get the benefit of rich contextual information that facilitates adaptation.

Based on our research and practice, we found that success in eliciting and reusing knowledge relies on a vital mix of these three ingredients:

1. Facilitating knowledge harvest
2. Engaging knowledge seekers
3. Brokering the knowledge

### Facilitating Knowledge Harvest

The facilitator steps in when knowledge originators cannot always see the relevance of their own knowledge. The facilitator helps to identify potential seekers of the originating team’s knowledge. Finally, the facilitator helps transport the knowledge to others who could use it.

Facilitation is crucial to bringing important knowledge to the surface, putting it in a meaningful and useful form, and communicating it to potential reusers. An effective harvest event environment encourages participants to speak concretely, avoid blame, withhold judgment, and ground their assumptions in shared meaning. When team members, aided by a skilled facilitator, reflect together on their work experience to derive lessons for themselves, confidence and comprehension both increase.

For example, a semiconductor manufacturer has endeavored to maintain performance standards across fabrication plants. The company deployed veteran managers from an established “fab” to a new plant during its start-up phase. The challenge was to help the new plant operate smoothly when the veterans left. Facilitators conducted a knowledge-transfer event for veterans and new managers. The facilitation elicited a deep discussion about judgment and non-intuitive plant behavior, concepts that were beyond the written manuals.

## Engaging Knowledge Seekers

The facilitator guides the conversation, but the seekers have a vested interest in the outcome and a practical understanding of what they need to know. A few prompts from a facilitator can often launch a very effective knowledge transfer. Seekers have the opportunity to focus discussion on the knowledge that matters to them and to explore those ideas until they understand them.

When knowledge seekers are engaged in the harvest, the likelihood of harvesting the most important knowledge and of having that knowledge put to use is increased. At the harvest event, the knowledge originators comprise a “panel,” with seekers in the audience. Seekers include members of other project teams, as well as methodology keepers, training developers, and marketing authors. Because seekers are motivated by self-

“LIVE” HARVESTING SESSIONS ZERO IN ON THE KNOWLEDGE PEOPLE REALLY NEED AND ALLOW FOR THE BACK-AND-FORTH CONVERSATION THAT CREATES GENUINE UNDERSTANDING AND HELPS POTENTIAL REUSERS ADAPT THE ORIGINATORS’ EXPERTISE TO THEIR OWN NEEDS.

interest, they ask extended questions and think about adaptation costs. The harvesting event brings out important nuances and meanings, not just recitations of “here’s what I did.” As a result of the harvest, teams are not only emboldened to reuse the knowledge but also more effective at using it.

Here’s an example. Pharmaceutical companies carry out a multiyear development process that goes from original research through in vitro testing, animal testing, clinical testing, FDA approval, launch, and marketing. At any one time, several teams will be at different phases of that multiyear process. At one large pharmaceutical company, a team that had just completed the FDA approval stage met with a team working on a similar drug category that was preparing to enter that phase. The originating team was able to transfer up-to-date knowledge about the social, political, and regulatory factors they experienced in their review that had implications for the type and detail of the data the approval would require. Bringing together originators and seekers in this knowledge harvest shortened the product development cycle, not only for this phase but for many other phases as well.

## Brokering the Knowledge

Both the facilitator and the seekers become “brokers” of the knowledge gained in the harvest, acting as intermediaries who bring the knowledge to others. The seekers take knowledge into their worlds—of projects in process, methodologies, training or marketing materials—and transfer it through participation, direct outreach to colleagues, and publishing.

At a technology-consulting firm, a knowledge seeker-turned-broker, who was responsible for project methodology, learned about a new approach to measuring data center power consumption during a harvest. The seeker went beyond the agenda of the harvest and probed the originating team’s innovative measurement experience with his questions. What he learned allowed him to package the methodology for subsequent data center power-management projects at different clients, saving considerable time in the assessment phase of subsequent projects.

“Live” harvesting sessions zero in on the knowledge people really need and allow for the back-and-forth conversation that creates genuine understanding and helps potential reusers adapt the originators’ expertise to their own needs. It also benefits the expert panel members, who often get insight into their own work in the process of explaining it and also learn from seekers—active knowledge exchange almost always goes in both directions.

## The Power of Connection

What makes the harvest better than more familiar efforts to capture knowledge in lessons learned databases or reports is the interpersonal component. By adding adroit facilitation, engaging seekers in the harvest, leading ongoing interpersonal knowledge transfer, or “brokering,” knowledge gets into circulation and improves the way we do our work. Knowledge harvesting requires an investment of time and skilled personnel, but it actually works. Knowledge harvesting is less about capture and more connection and conversation. ●

**NANCY M. DIXON** is an author and consultant working with clients to create effective ways to hold knowledge conversations. She is the author of eight books, including *Common Knowledge* and *The Organizational Learning Cycle*, as well as more than fifty articles that focus on how organizations learn.



**KATRINA PUGH** is technical program manager and WW knowledge management consultant with Intel Enterprise Solution Sales (ESS), responsible for knowledge harvesting, communities of practice, and knowledge management tools implementation. Previously, she performed strategy and technology consulting for fifteen years, with a focus on knowledge management and business process redesign.

