Katrina B. Pugh

Sharing Hidden **Know-How**

how managers solve thorny problems with the knowledge jam

oreword by Nancy M. Dixon

uthor of *Common Knowledge: How Companies Thrive by Sharing What They Know*

SHARING HIDDEN KNOW-HOW

How Managers Solve Thorny Problems with

Katrina B. Pugh

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FOREWORD

Sharing Hidden Know-How offers the opportunity for the reader to rethink the idea of lessons learned so that what is learned is an active exchange between those who have just gained important knowledge from a project and co-workers who want to improve the way they are working on a similar topic. The process is not limiting us to a look backward but to regard the process as an act of *discovering, with the help of colleagues, what can be drawn from a recent experience.*

Any organization must have the ability to learn from its own experience if that organization wants to change and innovate. Unfortunately "lessons learned" has earned a negative reputation in many organizations. And the reality is that such efforts have often been ineffective. However, a new way for organizations to learn from their successes and failures is provided in this book.

Kate Pugh invented the very interactive process that became "Knowledge Jam" while working at Intel and then carried it with her to Fidelity and finally to her own consulting practice. I've had the opportunity to work with Kate on a number of Knowledge Jams so I know that the process works. I've seen it draw out knowledge that an originating team would not have mentioned without process having stimulated their thinking. And I have even seen the members of the originating team come to a new understanding spurred by a provocative question asked during the Knowledge Jam.

The most difficult aspect of lessons learned has always been moving what has been learned into practice. Knowledge Jam addresses this issue by bringing brokers (representatives of the seeker organization) in to ask questions and to be responsible for implementing what they just learned in their own parts of the organization. Brokers are selected from those groups that are most likely to be able to make use of the knowledge that the originating team has gained through their work. When brokers leave the Knowledge Jam, they do so with specific implementation intentions and are measured as they complete those. The formality of the broker role solves the long-standing impediment to the implementation of lessons learned.

Knowledge Jam is an interesting combination of *push* and *pull*. Push happens when I tell you what I think you need to know. Pull happens when you ask a question based on your own need to know.

Knowledge Jam employs push when a manager decides that what has been learned by a project team needs to be shared. Targeted and limited push is the most effective way to push knowledge. Pull happens in the Knowledge Jam through the questions that brokers ask to pull knowledge from the originating team. The questions they ask arise out of their own curiosity and the answers they receive help them implement the lessons learned in their own units.

Knowledge Jam is a conversational process. Conversation remains the most effective way to exchange tacit ("hidden") knowledge. Explicit knowledge can be shared through documents, but tacit knowledge requires the give and take of conversation, which clarifies meaning, explores alternatives, expands the context, and creates *new* meaning.

Knowledge management (KM) is badly in need of more processes like the Knowledge Jam. Now, after nearly fifteen years, we have learned that the transfer of tacit knowledge requires conversation, not just documentation, no matter how exhaustively that documentation is written.

The reason why documentation is not the answer lies not in the inadequacy of technology but in how our brains store knowledge. Everything is stored, not in whole chunks, but in bits and pieces of experience. What we think of as tacit knowledge is really the human ability to draw on our past experiences to respond to new problems or questions. My friend Nick Milton tells a story about teaching his daughter to drive. His daughter asked, "When changing gear going down a steep hill, do I put my foot on the clutch before I put it on the brake, or do I brake first?" To answer that question, Nick had to get into the car and put himself "in the situation" in order to draw on his tacit knowledge.

That is what happens in a Knowledge Jam. The originators are asked questions that put them "in the situation" of the brokers. In order to answer the questions, the originators put together bits and pieces from different parts of what was probably a year-long experience. Knowledge that was tacit until the originator heard the question now comes together in the moment of responding. Originators do not "know" the response until faced with the need for it. Karl Weick, the well-known organizational theorist, is fond of saying, "How do I know what I think until I hear what I say?"

If knowledge management wants to meet the challenge of making use of the tacit knowledge, it will have to use processes like the Knowledge Jam, which bring the seeker and the originator into conversation with each other. Knowledge Jam is leading the way!

Nancy M. Dixon, Ph.D., principal, Common Knowledge Associates, and author of *Common Knowledge: How Companies Thrive by Sharing What They Know* and the "Conversation Matters" blog (nancydixonblog.com).

INTRODUCTION

At a new production facility of a major computer hardware manufacturer, performance appeared relatively stable during the first month of operation. Yet, when veteran operators (who had been "on-loan" to the new facility) departed, yields dropped and outages skyrocketed. Senior management couldn't comprehend why this could occur. Traditional knowledge-transfer methods, such as veterans' painstakingly recording procedures and one-on-one job-shadowing, failed to sufficiently engage operators in their future roles and failed to draw out the range of things that could go wrong when all parts of the factory were up and running.

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In order to accelerate knowledge transfer between consultants, a leading strategy consulting firm decided to produce video recordings of veteran consultants. After hours of recording time, preparation, tagging, uploading, and promotion, the fifteen-minute videos were not looked at by new project teams, even when those new project teams were doing follow-on work at the same clients as the consultants in the videos. The follow-on teams didn't find that watching videos "fit" with their road-warrior schedules and provided little value over and above simply reading PowerPoints. They continued to interact directly with the veteran consultants to sound them out about how historical lessons learned would play out in the future projects.

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When NGOs tried to introduce fertilizer application procedures to African farmers, initially the uptake was poor. The fertilizer process didn't fit in with the farmers' planting routine or the credit structures already in place for seed purchases. Unfortunately, fertilization didn't fit with the production methods or the local customs either. Until the community could be included in the process, farmers felt their new methods and values were in conflict.[1]

Sound familiar?

Managers have tried to deal with the failure to spread knowledge across organizations and groups by investing in process, people, and technology. Twenty years ago, it was "intelligence acquisition." Fifteen years ago, we tried "organizational learning." Ten years ago we tried "collaboration tools." Today, we put great hope in Web 2.0 or Enterprise 2.0.[2] And throughout these periods we applied dozens of knowledge-elicitation strategies like after action reviews. These practices each addressed only part of the problem.

I lived this first-hand. In my twenties as a strategy consultant I joined the intelligence acquisition crowd, and spent many long nights and weekends collecting information and designing data-structures for mining. After business school in the 1990s, I immersed myself in organizational learning. I memorized "action inquiry" phrases, scrawled systems thinking loops across walls of butcher paper, and sat in many dialogue circles. As collaboration technologies evolved, I trumpeted knowledge-portals and groupware tools. Today, I've become a zealot for Web 2.0 tools and Enterprise 2.0[3] tools—"Enterprise Social Software Platforms" or ESSPs—which tie people and knowledge together across companies and continents "frictionlessly."

Through that journey each business practice targeted symptoms of the times (info glut, change-resistance, globalization), but, taken independently, none has given managers consistent insight into how our experts or teams think about complex problems, and how to expose and apply that hidden know-how. Nor have those practices enabled us to consistently mobilize ourselves apace with markets and competitors, let alone to avert threats to our global climate or national security. How can we get better at sensing and responding (or, as President Obama's chief technology officer, Aneesh Chopra, puts it "How can we best contain, bob, and weave?"[4])? (See Figure I.1.)

THE ORIGIN OF THE KNOWLEDGE JAM

People have told me that I'm good at this bobbing and weaving thing. They tell me I've a knack for "reinventing" myself. I'm flattered, but that's not exactly how I see it. I think it's actually because I'm a packrat. Unlike my friends who collect cars and gadgets, I hoard yellow-highlighted grad school readings, worn running shoes, decades-old computer disks, and annotated spreadsheets of people I know. At first, when I counted the boxes of paper (twelve), the CDs (forty-eight),

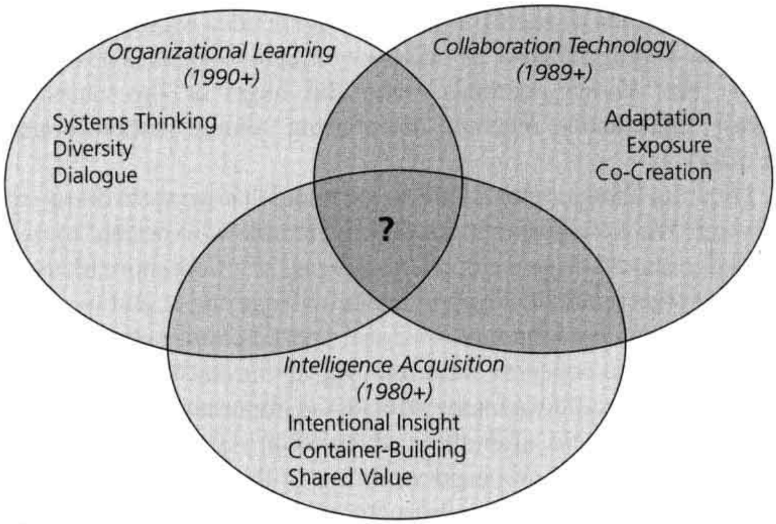

Figure I.1. *Historical Competences for Managing Knowledge*

loosely organized contacts (893), the pairs of running shoes (nine). I asked myself (rather sheepishly), "With all the great knowledge out there on the web, aren't I supposed to be clutter-free? The shining example of efficiency?"

But then, I saw my own method here: my things are imprinted with my experience. I find these useful because they are *accessible* and they are wrapped in layer of visible—and, surprisingly, practical—*context.* For the packrat like me, just as for the organization, context bridges to the useful from the random and arms me for what may come.

This I saw when working for Intel Solution Services, a small IT consultancy that was a division of Intel Corporation.[5] We lived in a sea of complexity—our clients had huge data-center optimization challenges, pressured to expand capacity and speed, while reducing costs and power consumption. Meanwhile, we had to generate both service revenue (happy clients) and chip revenue (Intel design wins).

We had a few highly successful consultants who had solved some of these problems in separate engagements across disparate industries and geographies. Management felt that brilliant ideas were not getting around the firm fast enough. Time-worn knowledge "capture" approaches—such as "post-mortems," "after action reviews," and "lessons learned"—seemed to fail because the knowledge captured had only limited value or shelf life. Even energetic idea exchanges in "town halls" had a short half-life, as only few intrepid associates absorbed the shared "best known methods." Nor did blogs or Innovation Jams produce high-quality, relevant, or enduring content without considerable effort.

Thinking about context, it occurred to me that we were doing things backward. We were pushing, not pulling. People who needed to use the knowledge should drive the conversation, as they were more likely draw out context that would make applying knowledge easier. But we couldn't completely abandon structure—we still needed coordination and a way to ensure that the concepts were relevant to our consulting service and sales goals. Nor could we underestimate the importance of collaboration technology—we were, after all, in seven countries and four time zones.

Ever a packrat, I proposed we bring in the three practice experiences. That is, the intention and structure ("Facilitation") of Intelligence Acquisition, the participation and social interaction ("Conversation") of Organizational Learning, and the idea mobility and integration ("Translation") of Collaboration Technology.

Here's how it worked: After some planning with management, I would bring together a team of project veterans, or the team of *knowledge originators*,[6] into conversation with seeker, or receiving, groups' representatives or *knowledge brokers.* This ninety-minute real-time exchange I facilitated virtually, typing into a Word document shared via a live-capture web tool, Microsoft LiveMeeting, where everyone could correct and comment on what was said. Afterwards, the brokers would recast, in their own formats, knowledge they had helped to collect (frequently with a few post-meeting clarifications from the originators). The collected ideas showed up in project plans, marketing documents, job aids, and process maps.

The "Knowledge Jam" term and jazz metaphor (both of which I adopted later) nicely capture how the brokers and knowledge originators "riffed" during the session. As they built on each other's ideas, originators' recollections became more specific and they added context ("Here's why we did that *then* and not before. ..."). Context made the knowledge more relevant to the brokers, as they were intent on discerning the portability of the ideas to *their* new contexts. Improvisation continued: our Knowledge Jam notes and diagrams not only were fed into process documents as planned, but they also fed MS SharePoint sites and forums, where other consultants found new ways to both leverage the

Jam content and to Jam further, with the now-famous Knowledge Jam participants.

THREE STURDY DISCIPLINES

In the years since, the three disciplines—Facilitation, Conversation, and Translation—came to be the sturdy legs of a Knowledge Jam stool. What appeared to be critical to the Knowledge Jam was that balance of coordination, improvisation, and a pragmatic "pull" of knowledge into its future uses around the organization. Unlike other attempts at knowledge transfer, this collaborative approach moved things along more efficiently and with more of a sense of ownership.

And closure. Originators knew their know-how was getting put to use, brokers felt that they had a hand in getting out "the good stuff," and managers felt dollars were not going into a sort of knowledge repository "black hole."

You'll be learning more about how these three disciplines flow through the Jam process, where they came from, and how, as culture and behaviors, they may become part of any dynamic knowledge-work culture (see Figure I.2). For now, let's get acquainted with them because they are the lead characters in the story:

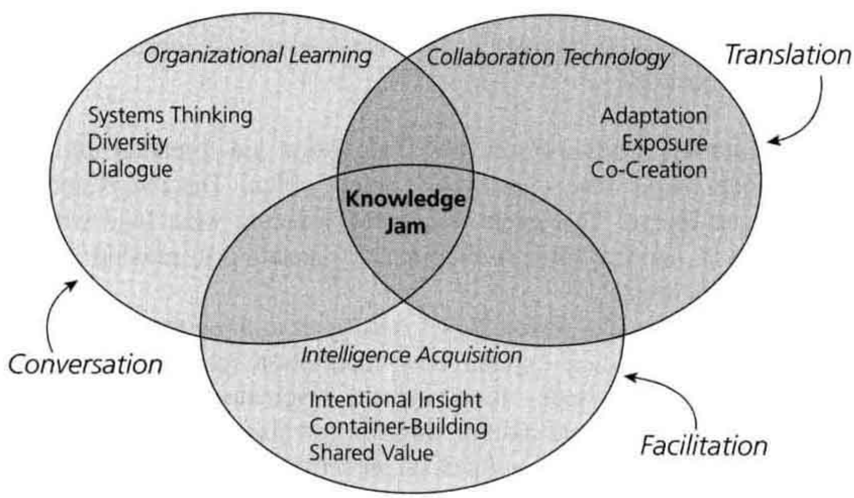

Figure I.2. *Knowledge Jam Disciplines for Managing Knowledge*

1. *Facilitation:* A facilitator helps select, plan, and coordinate the Knowledge Jam process, organizing the early structuring of the concepts (or "agenda"), providing quality control, aligning Jams to business objectives, and, most importantly, setting a tone of curiosity and respect for the Jam—a tone that fuels conversation which, in turn, yields unique and reusable insight. Facilitators model and reward respectful, open inquiry and discourage defensive, criticizing or protective attitudes.
2. *Conversation:* Knowledge Jam invites the curiosity of those who will use (or transmit) the knowledge. An open conversation between the knowledge brokers and originators/originator teams surfaces the conditions around the facts (How did you decide to do *that*?). It can also surface connections between events, outcomes, people, and the industry or markets that we hadn't considered. Drawing out context in this manner makes captured know-how more translatable from context to context.
3. *Translation:* Involvement gives the knowledge brokers a sense of ownership. Later, the brokers (and their cyber allies) efficiently translate and transmit the context-rich knowledge re-mixed within their world and reformatted for action. New vehicles suit the knowledge seekers, those who are embarking on a decision, product innovation, process revision, or outreach program. Brokers use change management strategies and collaboration technology like ESSPs to ensure Jammed knowledge is used and doesn't stagnate in a repository.

Facilitation, Conversation, and Translation are threaded into the Knowledge Jam's five-step cycle: Select, Plan, Discover/Capture, Broker, and Reuse. That cycle runs from targeting what (and whose) know-how is needed through eliciting it, translating it, reusing it, and measuring its impact.

In *Sharing Hidden Know-How* I start by describing the Knowledge Jam process, and then explain how facilitation maintains the tone throughout the five steps—involving the originators and brokers in know-how discovery and its remixing for new uses. Then, chapters on Conversation and Translation focus on the Discover/Capture and Broker steps, respectively, where relationships emerge, and so do new applications for the knowledge, enabled by collaboration tools, social media, and other technologies. Figure I.3 shows the steps.

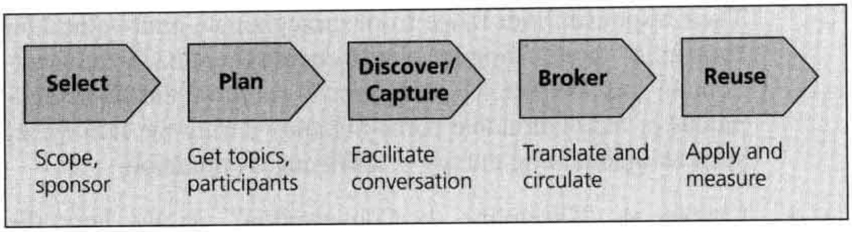

Figure I.3. *Knowledge Jam Steps*

What You'll See in This Book

- Chapter 1: "Knowledge Jam Rationale," describes three thorny knowledge-work problems—"knowledge blind spots," "knowledge mismatches," and "knowledge jails." Knowledge Jam responds to these by insisting on more intentional prioritization and planning, by involving knowledge seekers in choosing and surfacing knowledge relevant to them, and by having a "put-knowledge-to-work" step (not just a repository). I'll teach you the Knowledge Jam process in Chapter 2, and then expand on Knowledge Jam's three disciplines in Chapters 3 through 5; then in Chapter 6 I'll see where Knowledge Jam rejuvenates the manager plagued by thorny problems into a "Bespeckled, Married, Emancipated" hero.
- Chapter 2, "Knowledge Jam Basics," describes the five steps of the Knowledge Jam cycle. That is, how we choose, prepare, execute, and get value from the Knowledge Jam. We'll discuss how each step reveals Knowledge Jam's uniquely collaborative spirit and its dogged focus on applying—not just collecting—know-how. You will learn how the five-step process makes up Knowledge Jam's essential *mechanics*, while the disciplines of Facilitation, Conversation, and Translation (detailed in the chapters that follow) make up its *ecology*.
- Chapters 3 through 6 explore the key differentiators of Knowledge Jam and why it is uniquely suited to solve those thorny problems that drag efficiency, innovation, and job satisfaction:
  - Chapter 3, "Discipline 1: Facilitation," explains how facilitators bring intention, tone, and a value-orientation to the Knowledge Jam. They play the roles of process consultant, project manager, change agent, cheerleader, and networker.

Their responsibilities range from strategizing a high-value Jam "portfolio" to adjusting the subtle chemistry of each conversation. In this chapter we also discuss some of the finer techniques of facilitation that come in handy during the Jam cycle, such as maintaining energy or diffusing dysfunction.

- Chapter 4, "Discipline 2: Conversation," shows how the "posture of openness," the "pursuit of diversity," and the "practices of dialogue" make collaborative knowledge elicitation possible. Bringing a diverse, widened perspective to respectful interactions results in more generative conversation. That, in turn, helps us to generate more useful know-how. Conversation also fuels a lasting rapport between originators and brokers from which we all can benefit as we take on the task of putting know-how work.
- Chapter 5, "Discipline 3: Translation," provides a how-to for Brokering, that is, knowing and representing the knowledge-customer or "seeker," remixing content for reuse, promoting and modeling reuse, and capitalizing on the relationships triggered in the Knowledge Jam to help refine ideas. Here I also describe how social media best broadcast and integrate know-how, improve originator-seeker networking, and extend knowledge velocity and durability.
- Chapter 6, "Bespeckled, Married, and Emancipated," revisits the "blind spots," "mismatches," and "jail"—thorny problems from Chapter 1—and recaps how the Knowledge Jam's boundary-spanning (Facilitation discipline), participative knowledge-elicitation (Conversation discipline), and stewardship (Translation discipline) are a viable combination for overcoming those hazards.

- Chapters 7 and 8 explore where Knowledge Jam came from and where it might be extended into the planning and managing of change in the organization:
  - Chapter 7, "Knowledge Jam Heritage: Prequel to the Three Disciplines," shows how the disciplines of Knowledge Jam (Facilitation, Conversation, and Translation) derive, respectively, from three business practices developed over the last twenty years: intelligence acquisition, organizational learning,

and collaboration technology. Rooted in those business practices, Knowledge Jam may also be in for an exciting ride, as those practices are not standing still. They evolve as work becomes more wired, more globalized, and more interdependent. Knowledge Jam as a practice will also evolve, but it won't forget its origins.

  - Chapter 8, "Comparing Knowledge Jam to Other Knowledge-Capture Methods," proposes a model for looking at Knowledge Jam's properties alongside other knowledge capture/transfer methods. Many managers have asked, "What's new here?" To help you answer that question, I provide a side-by-side comparison so that you can consider when Knowledge Jam might replace or complement other methods that you are currently using to bring out and share know-how. Knowledge Jam is in good company, but it is the only practice that scores high on all three method components: structure and intention (Facilitation), sense-making (Conversation), and knowledge pull and integration (Translation).

- Chapters 9 through 11 and the Appendices help you to take action:
  - Chapter 9, "Building a Knowledge Jam Practice," shows how to define, sell, staff, launch, and evaluate a Knowledge Jam program. You'll also find frameworks to model your Knowledge Jam business case. I invite you to explore how to integrate Knowledge Jam into a larger KM or innovation strategy. And I propose Knowledge Jam facilitation—with its strategizing, planning, eliciting, and motivating—as a leadership developmental opportunity.
  - Chapter 10, "Knowledge Jam for Leading Change and Leveraging Social Media," explores Knowledge Jam as a practice that can be used in making strategy—and "making it stick." Knowledge Jam brings about a culture of change—intention, openness, and stewardship—and brings that culture into today's tools of change, such as formalized strategic planning and transformational technology implementations. In this chapter, Knowledge Jam and social media switch roles: Social media efforts are not simply Knowledge Jam's enablers, but they can be enabled by it, resulting in better content quality, interaction quality, and velocity for ideas.

- Chapter 11, "An Invitation," considers how current events and collaboration technology developments could mean new uses of Knowledge Jam and new forms of "Jamming." It also issues an invitation to the reader to participate in a community of "Jammers Without Boarders."

- The Appendices provide a glossary, templates, case studies, and FAQs, as well as deep dives on Knowledge Types.

Knowledge Jam improves how many actors inside and outside the organization adapt to the thorny problems in knowledge work in our marketplaces, institutions, and nations. It does this by building on what we know (even when we didn't know we knew) and by putting hidden know-how into action. I'm writing this book for several of you actors.

- For the business, IT, or HR manager (who might be a Knowledge Jam sponsor and underwrite the business case for Knowledge Jam), I describe Knowledge Jam's rationale, program steps, and its surprisingly lean use of resources.
- For the process facilitator (who plays the drumbeat of the Jam), I help you lead through each of the steps and learn to set a tone of common curiosity.
- For the participants (knowledge originators and brokers), I help you to listen, probe, and reflect out loud on your own experiences, and discern how to remix the know-how (and its context) for new processes, products, strategies, and organizational structures.
- Finally, for change agents (doing projects, innovating products, and improving your operations and functions), I offer improvements in knowledge absorption into your planning, and change absorption into your organization. You realize these when you put Knowledge Jam's process and disciplines "inside," and Knowledge Jammers capitalize on collaboration tools such as wikis, blogs, microblogs, and teamspaces.

In a way, I'm *your* broker, too. Most of the chapters are practical how-tos with examples and my lessons from others who have been my knowledge originators for this book. I will share stories and references I've found useful as I've played facilitator, sponsor, broker, and champion myself.

Just a note on terminology: I use the terms "knowledge," "know-how," and "insight" interchangeably, and I don't get hung up on whether his *wisdom* is her *data*, so long as it all makes us more productive and resourceful. I *do* make the distinction between explicit knowledge (written, documented) and tacit knowledge (unwritten, hidden). For Knowledge Jam, we care most about the latter. Also, I use the term "organization" generously. It applies as much to the incorporated or registered company as to the non-profit group, the government agency, and the loose network of affiliated practitioners.

Knowledge Jam improves the organization's resilience by drawing in practices from the best of intelligence acquisition (Facilitation), organizational learning (conversation), and collaboration (Translation). I hope you'll come to see that a Knowledge Jam culture of intention, openness, and stewardship can extend beyond the Knowledge Jam cycle (Select-Plan-Discover/Capture-Broker-Reuse) and into the fiber of your organization. I invite you to join me in a practice that's more authentic, efficient, and, ultimately, more rewarding than traditional means of process improvement, change planning, and innovation. Just grab your tambourine and join the jazz ensemble!

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