In the SHADOWS

Shadowing employees **reveals process insights, improvement** opportunities

by Ali Nigh

IN LOOKING FOR improvement opportunities, organizations might convene executives and managers, review spreadsheets displaying myriad metrics and trends, or bring in consultants for guidance. Seeking ways to squeeze more out of processes is quality at its most basic level, but lost in hours of high-level discussions, analysis of historical data and proposals of hypothetical solutions is another quality basic: Go where the work is.

In lean, the concept of *gemba*—derived from a Japanese term that means "the real place"—is used to put those seeking improvement into the physical areas they want to improve. Another way to effectively discover real problems and improvement potential is through job shadowing.

In 50 Words Or Less

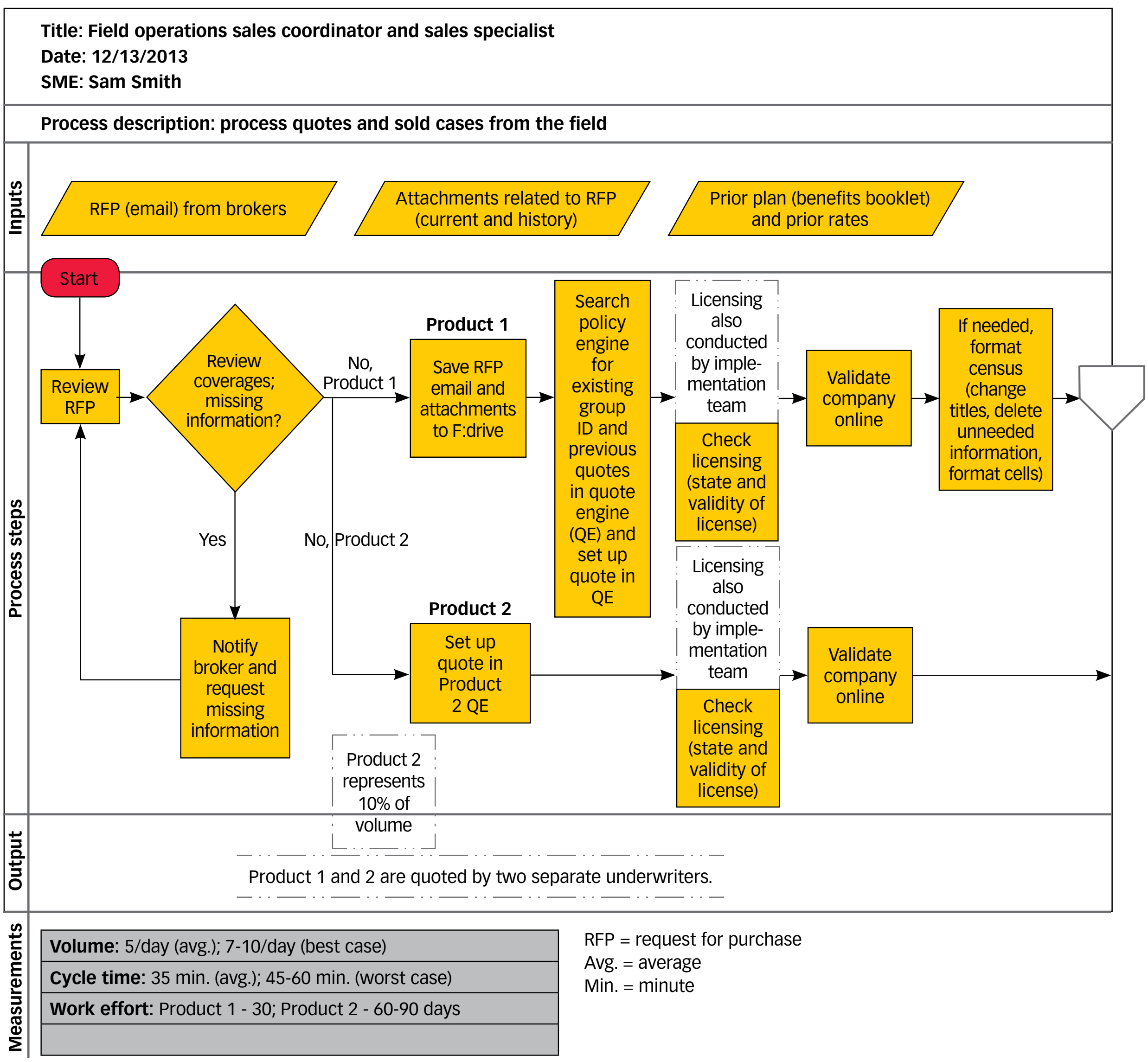
- Shadowing employees is a way to engage a process's true experts—those doing the work.
- Managers can glean valuable information, accurately document processes and uncover new possibilities for improvement.
- A three-step approach to job shadowing ensures it effectively captures the information you want while respecting employees' schedules and anxieties.

Job shadowing is a technique used to gather insights about people, processes and technology. It can yield detailed information on end-to-end processes, inputs, outputs, baseline metrics, problem areas, opportunities, and employee behaviors and attitudes. Job shadowing has two elements: a frontline worker and observer. During shadowing, for 30 to 60 minutes the frontline worker performs his or her job, or a portion of the job as requested by an observer, while explaining the duties being conducted.

There can be one or two observers who watch the frontline worker's step-by-step process and ask questions for clarification or further details. Observers may survey several frontline workers' processes to collect information from various roles in an end-to-end process. After a job-shadowing session, observers review collected information, collate their findings and determine a compelling way to present it. The frontline worker may be contacted again to validate outputs created by observers.

Job shadowing's most-common outputs are detailed process maps (see Figure 1) that include key metrics such as a role's number of full-time equivalents (FTE), the number of hand-offs, decision points, quality checks, problem areas and bottlenecks. Additional outputs might include a list of problem areas or pain points—by people, processes or technology—prioritized by frequency and

Detailed process map example / FIGURE 1



severity, interview notes, a list of possible opportunities and recommendations for improvement.

What's the value?

Unlike traditional observation, job shadowing requires interaction between an observer and frontline worker. This allows for a deeper understanding of workers' tasks, and it can serve as a window into employee morale by showing how they feel about their work.

This interaction provides an opportunity to discuss improvement ideas. The approach allows you to quickly document unique processes, observe variation in roles that share similar processes and identify unnecessary complexity.

There are at least two situations in which job shadowing should be considered as the primary approach:

1. Manufacturing and service operations without process documentation that have processes that must be understood.
2. Situations in which the complexity of a process, system and organizational language is not easily understood in existing process documents, interviews or workshops.

Pros and cons

Job shadowing can be valuable, but like any tool, it only should be used if it's the right tool. To help determine whether it will be the right tool for your project, consider these pros and cons.

The points in favor of job shadowing are:

- The process engages the true experts—frontline workers.
- It captures every critical process step.
- The approach allows you to capture a detailed process map.
- After detailed processes are explained rather than demonstrated, frontline employees might unintentionally leave out critical steps. This rarely happens in job shadowing because the process is being documented as it's observed.
- Job shadowing is personal and interactive. Observers have the opportunity to form relationships with frontline workers and observe their behaviors and feelings about their jobs. This type of feedback is rarely elicited during group workshop sessions.
- Observers can ask questions and seek clarifications to gain desired information.
- It allows you to document unique or loosely defined processes. These processes are difficult to capture during workshops with several people.

The case against job shadowing includes:

- To access frontline workers, job shadowing requires them to sacrifice their time.
- The time required to create a schedule and get access to frontline workers is highly variable. Scheduling can be further complicated if the roles you must shadow are in the midst of a peak business season and under tight deadlines.
- It requires a sizeable time commitment from an observer, such as time needed for shadowing, reviewing and documenting notes, drawing conclusions and finalizing documentation. Typically, workshops are less time-intensive than job shadowing.
- If you cannot job shadow an appropriate sample size, you could be left with inaccurate information because there isn't social validation as you might gain in a workshop.

Finding the magic number

There is not an exact equation for determining how many job shadows are necessary and how long the shadowing process will take, but there are a couple of good grounding principles.

Identify how many different roles, not FTEs, take part in an end-to-end process. The number of roles identified is the minimum number of job shadows you should complete. If there are different role designations within one role due to products or customers that make the process distinctly different, you may require additional job shadows. Engage a subject matter expert (SME)—that is, someone who is familiar with the end-to-end process—to determine which roles and how many must be shadowed.

Imagine you're shadowing the implementation process of a large insurer's back office. Through a high-level process map, an SME identifies five roles in the implementation process—intake, sales specialist, implementation specialist, eligibility specialist and contracts specialist.

Within those five roles, there are two in which the process is distinctly different due to the product type (see Table 1, p. 34). By first understanding the number of roles and determining whether other factors are creating distinctly different processes, you can determine how many processes should be shadowed. In this example, the magic number is seven.

The shadowing timeline

Each job shadow should last 30 to 60 minutes. For less-complicated roles, 30 minutes will suffice. More often than not, however, you will need 60 minutes to observe the process and ask relevant questions.

Job shadowing is an intense, interactive activity. It takes a tremendous amount of concentration to absorb as much information as possible in the short amount of time you spend with a frontline worker. Try not to conduct more than three shadows per day. Time not spent job shadowing should be used to document lessons learned.

The length of the entire job-shadowing process depends on the number of shadows identified. This variability is due to frontline workers' availability, peak business seasons and system downtimes. It's easier to digest an end-to-end process if the roles shadowed are scheduled in the order of the process.

Three phases of shadowing

There are three phases to job shadowing: Prepare, do and synthesize. To explain these phases in further detail, I've used examples of a particular step's outputs or anecdotes.

Phase one—Prepare. Preparation prior to job shadowing is critical. Six points will help you navigate through shadowing preparation:

1. **Understand the high-level process.** Work with individuals on a project team or local SMEs who understands the end-to-end process to develop a high-level process map. Start mapping the high-level process by creating a suppliers, inputs, process, outputs and customers (SIPOC) diagram of the end-to-end process.

   After the high-level process is documented, collaborate with the project team and SMEs to understand which processes or roles should be shadowed. Prior to each job-shadowing session, remind yourself where that frontline worker you're shadowing fits into the overall process.
2. **Identify the right people.** Leverage your project team or SME's knowledge of internal processes. After the SIPOC and high-level process map have been drawn, ask your project team and SMEs to identify subprocess SMEs—that is, frontline workers. Emphasize to your team that you want to talk to the person who actually does the process rather than the person who manages it.
3. **Respect hierarchy.** After frontline workers are identified, set up a quick meeting with a frontline worker's supervisor. Encourage a key team member to set up the meetings and explain the project, its goals and envisioned outputs to the supervisor. During this conversation, be sure to explain how much time you would like to spend with the frontline worker and any necessary follow-up.
4. **Collaborate with insiders and don't overwhelm the frontline worker.** Based on the high-level process map and SIPOC, create a job shadowing process, plan and schedule. Two observers is the most who should sit with a frontline worker in a job-shadowing session.

   Before shadowing, an observer should create a template of what a final document will look like and determine what details to include. If there are two observers, prior to the job shadow they should determine who will ask most of the questions, be the primary note taker and create the final documentation.
5. **Explain the project and job shadowing.** Develop a two to five-minute elevator speech about your project and your purpose for job shadowing. It's your job to put the person being shadowed at ease. Stay on the project's messaging: For example, "We have aggressive growth plans, and we need to re-evaluate how we do things today to be prepared for this growth." Also be sure to highlight any of the project's potential positive outcomes.
6. **Prepare questions and a template to capture information.** With the project team, identify the information you want to capture. Develop a list of generic questions for the frontline workers (a list of sample questions is provided in the sidebar article, "Basic Job-Shadowing Questions," p. 36). These should be direct questions that elicit the type of information you're seeking. Create a template to easily capture the information collected during job shadowing (see Table 2).

Phase two—Do. After preparing, the next phase is conducting the job shadow. These eight tips can help ensure successful job-shadowing sessions:

1. **Elevator speech.** When meeting the frontline worker you're job shadowing for the first time, introduce your-

Determining how many processes to shadow / TABLE 1

Role	Differences by product
Intake (role one)	Product diagnostic
Sales specialist (role two)	Product diagnostic
Implementation specialist (role three)	Product A
	Product B
Eligibility specialist (role four)	Product A
	Product B
Contract specialist (role five)	Product diagnostic
Job shadows required	Seven

Template for capturing job-shadowing information / TABLE 2

Data to collect	Position/role	Position/role
Position description		
Number of full-time equivalents		
Inputs		
Outputs		
Time (percentage of day, quantity and units)		
Cycle time (best case, worst case and average)		
Complexity drivers		
Pain points (people, process and technology)		
Root causes (people, process and technology)		
Errors (type and frequency)		
Automation and improvements		
Areas to explore		

self, give the project elevator speech, and remember to stay on the project's messaging.

2. **Ask to see the frontline worker carry out the process instead of merely talking about it.** Some frontline workers will prefer to tell you about their processes rather than demonstrate them. Gently push the frontline worker to perform the process while you observe.

   This will help avoid the common pitfall of missing steps, and it makes it easier for you to document the process. By observing the actual process, you can see the systems and steps, understand the difficulty level of a process and learn the speed at which a step is performed.

   Finally, observing the behavior of the individual can lessen the barrage of jargon, acronyms and system names that are common when someone explains a process instead of doing it. The act of observing the process step-by-step better lends itself to asking and answering questions in the moment.

3. **Estimation is OK.** People often worry about making educated guesses and estimations because they are anxious that these numbers will be quoted officially and held against them. If useful data exists, use them, but if useful data don't exist or are too cumbersome to collect, encourage frontline worker to at least make estimations.

   It can be helpful to ask the frontline worker to provide not only the average estimate, but also best and worst-case scenarios. If the frontline worker remains nervous about providing an estimate, suggest something absurd. Generally, mentioning something outlandish nudges the frontline worker to provide a realistic estimation.

4. **See it, touch it.** Ask to see inputs, outputs, reports and actual documents during the job shadow. Ask for copies or electronic files you can keep. Also, ask to see the systems frontline workers use to determine whether they're updated, how difficult they are to use and whether their performance speeds are fast or slow.

5. **Listen.** As the observer, your job is to actively listen, take notes, and ask guiding and clarifying questions. Encourage frontline workers to share their expertise with you by allowing them to answer questions fully and uninterrupted unless necessary.

6. **Guide the conversation.** This may be the only time you meet with this worker. Assert yourself and redirect the frontline worker if he or she goes off topic or provides too many or few details.

7. **Clarify.** If something the worker showed or explained to you is unclear, speak up. A good way to clarify is to repeat to the person what you heard and ask whether it's correct. If it isn't, ask him or her to point out what you misunderstood (see the sidebar article, "Basic Job-Shadowing Questions," for a sample of clarifying questions you can use).

8. **Express gratitude.** At the close of shadowing sessions, genuinely thank frontline workers for their time. Reiterate key information you heard, and explain your next steps, including what you will do with the information they provided.

Phase three—Synthesize. After job shadowing is finished, the heavy lifting begins. All of the information you heard during shadowing sessions should be documented.

Documentation is less overwhelming if you populate your data-collection template with raw data that can be cleaned up as needed. If your job shadowing schedule allows, document the process as soon as possible after a shadowing session. Your final-document template should be a good starting point, but it may evolve as you use the template more. Two steps can help you synthesize the information you've captured:

1. After a shadowing session is documented, validate your draft or final documentation with the project team, SME and frontline worker. This helps ensure information is accurate and allows the team a chance to give you feedback on the final product. If it's documented and shared quickly, this helps guarantee the look and feel of the final documentation is agreed on up front, which can avoid potential rework in the future.

2. After validating your findings and documentation, all materials should be analyzed. As an observer, you are in a unique position to add value through reframing the situation, drawing conclusions and developing recommendations.

Job shadowing is an excellent approach for learning, gathering a tremendous amount of valuable information, engaging true experts (frontline workers), documenting unique and complex processes, and identifying improvement opportunities.

Like many activities conducted on a project basis, it's important that you're sensitive to an organization's culture and employees, and that messaging is top of mind in guiding your job-shadowing approach. If an appropriate amount of time and resources is available, shadowing is a powerful technique that can deliver deep insights. QP

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BASIC JOB-SHADOWING QUESTIONS

A vital part of job shadowing is identifying information you and a project team want to capture. Follow-up questions that clarify previous answers are equally important in ensuring the information you received wasn't misinterpreted.

These 25 sample questions can give you direction in determining how to draw out the information you're seeking.

Initial questions

1. Can you briefly describe your background and current position? Please include your title.
2. What is your role in this process?
3. What is the trigger or starting point for this process?
4. Typically, what is the hand-off, end point or final check in the process?
5. Can you describe key activities or process steps you follow at a high level?
6. What are key inputs you need to complete your work in this process? Do you have any examples we can see?
7. What are critical outputs of your process? Do you have any examples we can see?
8. Do you have any checklists in your process to ensure success?
9. What else do you do that you haven't shown us?
10. Are there other tasks or things you do in the course of the day—such as reporting, attending meetings, fixing a printer, helping another department or fielding frequent special requests?
11. Within the organization, who do you work with in this process? Who's the supplier of information or customer receiving the information?
12. What are your key success factors? How do you know whether you have successfully completed your task?
13. What goes wrong with this process? What causes the most problems in your work?
14. Are there any formal meetings or reviews in your process? If so, who is included, how often do you meet, what is reviewed and are criteria used to measure success?
15. How do you know when a step is incomplete, done poorly or done well?
16. If you were going to teach a class on this process, what five things would you tell students are essential for success?
17. What happens when you don't do this step or process well?

Clarifying questions

1. If you were talking to a family member, how would you describe your job and the role you play in the organization?
2. Could I repeat this back to you? Correct me where I go wrong (explain what you understood).
3. How would you describe your role or the process steps without using organization-specific terms or acronyms?
4. What do you mean when you say (insert unknown phrase or term)?
5. How often would you say you do this during a best-case scenario, on average and in a worst-case scenario?
6. How long does this take during a best-case scenario, on average and in a worst-case scenario?
7. Who is "we?"
8. Could you show me an example of that (system, document or report)? —*A.N.*