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Increase your odds of hiring the right job candidate by using
forward-looking interviews by **Peter J. Sherman**

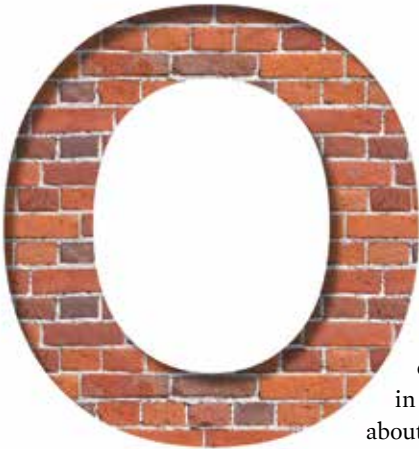
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JUST THE FACTS

Often, traditional interviews use behavioral questions to explore a candidate's past experiences to assess how he or she navigated specific situations and used skills relevant to the position.

Behavioral questions, however, may not provide a complete picture of how a candidate will perform in the role.

Forward-looking interview questions allow you to tap into the candidate's expertise and thinking, encouraging them to speculate about potential scenarios and trends that may affect their job, the organization or the industry.



ften, traditional interviews center around a candidate's past experiences to assess how he or she navigated specific situations and used skills relevant to the position. These are known as behavioral interview questions. Common examples include, "Give me an example of a challenging situation you faced in the workplace. What happened? What did you do to resolve it?" and "Tell me about a time when you disagreed with a peer or supervisor. How did you handle it?"

While informative and relevant during the interview process, behavioral questions may not provide a complete picture of how a candidate will perform in the role. Candidates can rehearse answers to common behavioral questions, making it harder to assess their authenticity and actual problem-solving skills.

Enter the forward-looking interview.

A forward-looking interview focuses on exploring potential challenges, opportunities and trends. The goal of a forward-looking interview is to tap into the candidate's expertise and thinking, encouraging them to speculate about potential scenarios and trends that may affect their job, the organization or the industry.

By delving into the candidate's foresight, the interview yields insights that go beyond historical performance and data, offering a glimpse into how the candidate thinks strategically while on his or her feet. Can candidates deal with uncertainty, or do they become paralyzed with the unknown?

Here are five ways to screen candidates—specifically, quality professionals from frontline operators to executives—using the forward-looking interview technique.

1. Ask the candidate to define a problem

Defining problems correctly is one of the most fundamental skills for any quality professional. It requires asking the right questions and synthesizing the information into a compelling problem statement while minimizing bias. Verbally describe

the problem and ask the candidate to define the problem within 15-20 minutes. It's best to keep the problem description somewhat vague to properly evaluate the candidate's critical thinking skills.

Here are some examples: "We're noticing that yield in the plant is declining." "Our customers are complaining more frequently about late orders." "Changeover time on our equipment is taking too long."

While responses will vary, here are some essential components that should be included in defining a problem. Note, not all are required.

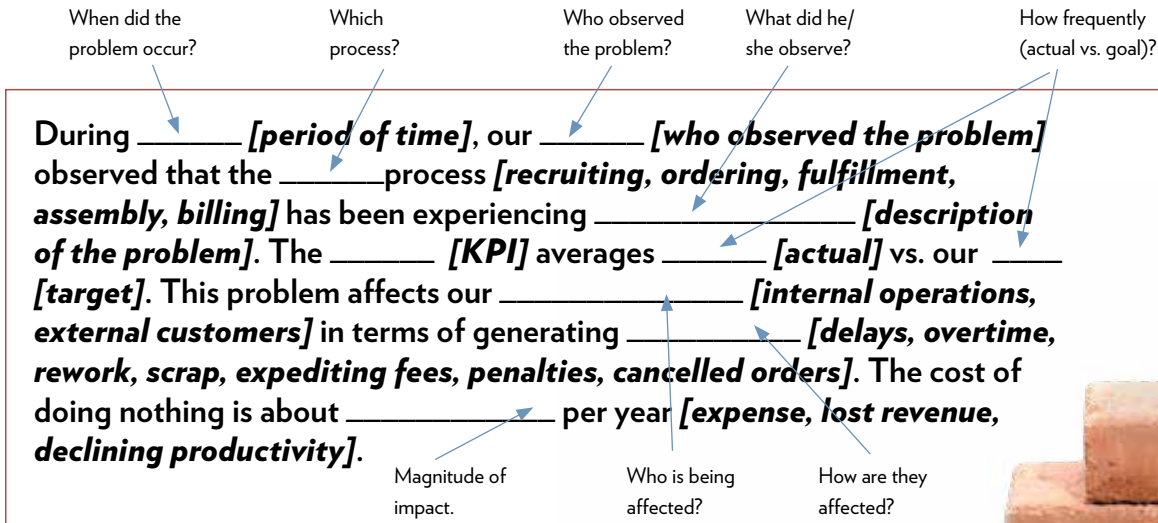
- **Problem definition.** Are candidates asking fundamental problem definition questions using proven techniques such as the 5W2H?
- **What** are the symptoms of the problem you're observing?
- **When** did you observe the problem?
- **Where** is the problem occurring?
- **Who** observed the problem?
- **Why** is the problem occurring?
- **How frequently** is the problem occurring?
- **How** and under what circumstances is the problem occurring?

Figure 1 shows a problem statement framework of how a candidate might synthesize responses to these questions.¹

- **Disaggregating the problem.** Because many problems often start out vague and complex, it may be necessary to disaggregate or break down the problem. Often, this helps identify what part of the problem to focus on, leading to potential pathways to a solution.

FIGURE 1

Problem statement framework



KPI = key performance indicator

FIGURE 2

Defects example logic tree

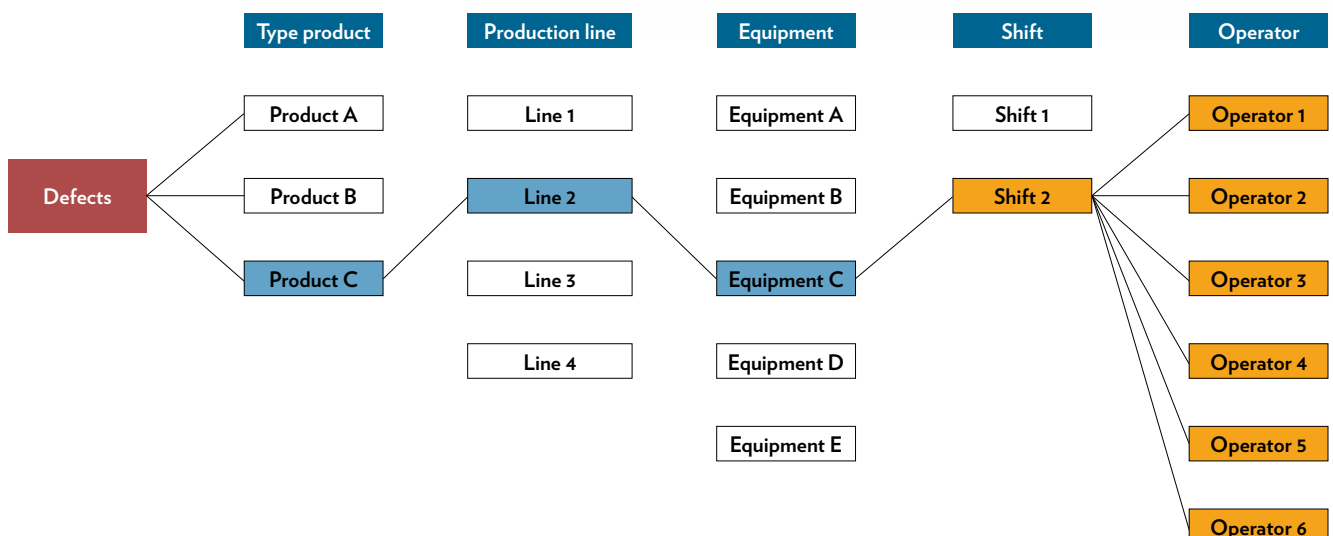
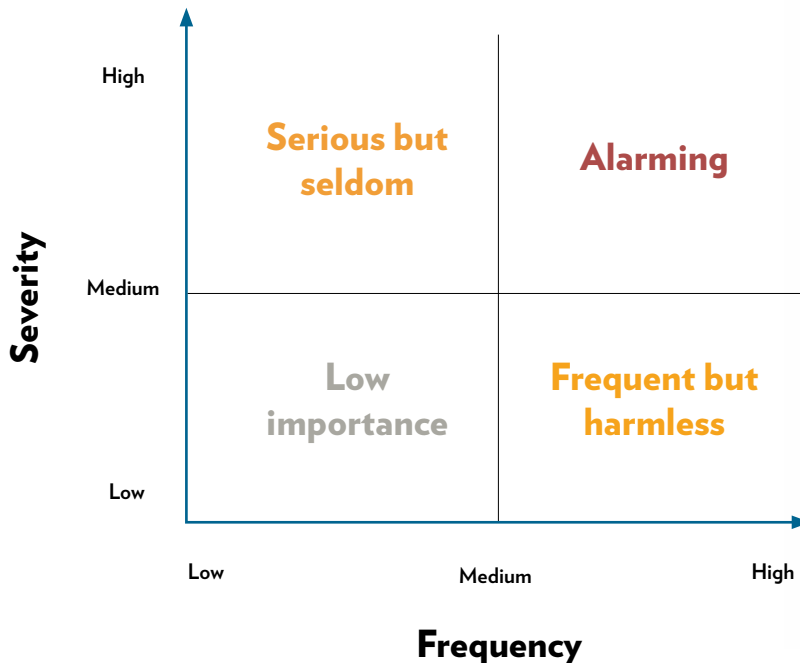


FIGURE 3

Severity vs. frequency matrix



Logic trees are simple structures for seeing the elements of a problem clearly and keeping track of the problem's different levels. Think of these levels as trunks, branches and twigs.

While the type of logic tree varies based on the type of problem, there are some fundamental categories. The key is to be flexible. Examples include:

- **Defects:** Which product type(s)? Which production line(s)? Which piece(s) of equipment? Which shift(s)? Which operator(s)? See Figure 2 (p. 69) for an illustrative example of applying logic trees to defects.
- **Late orders:** What order type(s) (stock or build to order)? Which product type(s)? What configuration level (simple, medium or complex)?
- **Returns:** What type of return (incorrect SKU, wrong quantity, not to specification or damaged)? Which customers (existing or new)? Where are the returns (geographically)?
- **Cost over-runs:** Which category (direct or indirect cost)? If direct, what type? If labor, what sub-type of cost? What reason? Which production line?
- **Estimating the cost of doing nothing (CODN):** The CODN is the cost of letting a problem continue unabated. Calculating CODN over a full year is the best way to show

the impact and speak the language of management. The CODN can include scrap, rework, overtime, penalties/ fines and even lost revenue. There are two ways to calculate the CODN:

$$\text{CODN} = \text{total defects per year} \times \text{cost per defect} \\ (\text{scrap, rework, overtime, penalties})$$

or

$$\text{CODN} = \text{percentage defect rate} \times \text{volume per year} \times \text{cost} \\ \text{per defect (scrap, rework, overtime, penalties).}$$

Qualified candidates should be comfortable making reasonable assumptions, and quantifying and extrapolating these costs over time (typically a year). The key is to be directionally correct, not precise.

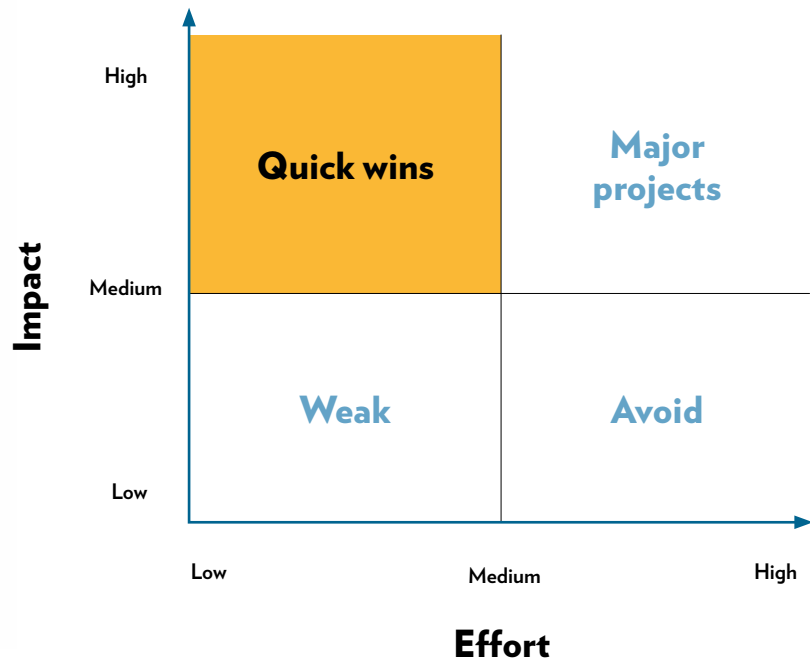
2. Give the candidate a real problem to solve

Provide promising candidates a problem to solve during the interview. You can use a real unsolved problem, which has the advantage of providing you with several potential solutions, or a problem that you've solved already, which means you'll already know the steps that should be included in an answer.

Another scenario is to present the candidate with multiple unsolved problems. Describe the problem verbally or provide

FIGURE 4

Effort vs. impact matrix



a written description, give the candidate a few minutes to think, and ask the candidate to walk you through the steps he or she would take to investigate and resolve the problem.

Here are some basic problem-solving guidelines and techniques to look for in how a candidate responds:

- Prioritizing problems:** Multiple problems require effective and rapid prioritization. One simple tool to prioritize multiple problems is the severity vs. frequency matrix (see Figure 3). Severity refers to the magnitude of the problem's effect, and frequency is how often the problem occurs. A problem with high severity and high frequency should be considered alarming and ranked highest in priority. A problem with low severity and low frequency, on the other hand, should be ranked lower in priority.
- Problem-solving frameworks and tools:** Is the candidate using proven frameworks—such as plan-do-check-act; define, measure, analyze, improve and control; or 8D—or are they immediately jumping to solutions? Does the candidate suggest going to the *gemba*²—Japanese term for place where the value-creating work occurs—to observe the problem, or is he or she content to stay in the conference room? Can the candidate use a Pareto chart to categorize and prioritize issues? Can he or she distinguish between cause and effect? Better still, is the candidate structuring possible causes using

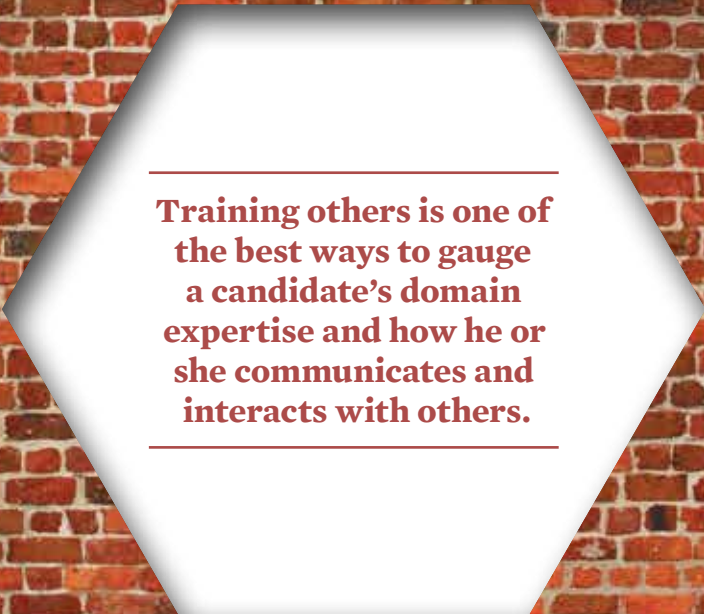
a fishbone diagram and drilling down to the root cause via five whys?

- Solution frameworks:** Does the candidate frame the possible corrective actions in terms of interim fixes, permanent solutions or both? Is he or she prioritizing the solutions using decision-making tools such as short term vs. long term, or an effort vs. impact matrix? Effort refers to what is required to implement the solution (such as cost, time or technical complexity). Impact refers to the benefits (such as eliminating the problem, financial benefit or customer satisfaction). See Figure 4.

Solutions that are low effort and high impact represent quick wins. In contrast, high effort and low impact solutions should be avoided.

From whose perspective is the candidate considering the solution's benefits? Internal (business), external (customer) or both? How does the candidate present his or her read-out? Using a whiteboard, or drawing a simple diagram in a notebook?

- 3. Have the candidate lead a *gemba* walk** A *gemba* walk is a structured, respectful walkthrough in the workplace to understand the nature of the work and identify improvement opportunities. Ask the candidate where



Training others is one of the best ways to gauge a candidate's domain expertise and how he or she communicates and interacts with others.

FIGURE 5

Open-ended questions

Open-ended questions

- > Closed questions encourages yes/no responses.
- > Open-ended questions require a longer, more thoughtful response.
- > Consider starting with words like “what” or “how.”

Closed-ended

> When did this happen? Has it happened before?

> Did you [report it to your supervisor, submit a maintenance ticket, talk to quality]?

> Do you understand how to _____?

Open-ended

> How did you know there was a problem?

> What do you think could be causing the problem?

> Can you show me how you do _____?

he or she would like to start the *gemba* walk. This will give you a feel for how the candidate thinks strategically. Does the candidate respond with “production,” or say, “Walk me through the entire value stream order-to-ship.”

Does the candidate start at the front entrance where your customers walk in, or does he or she start at shipping and walk backward to see how work in progress builds up? Either is suitable. How does the candidate interact with the line operators, leads, supervisors and managers? Is he or she establishing a rapport, or is it more like an inquisition? Building rapport starts by introducing yourself, informing others what you’re doing (for example, trying to understand how the work is performed) and asking whether they have a couple minutes to describe what they’re doing and how they do it.

Is the candidate trying to fix the problem or asking questions? The best questions are coaching—open ended, nonleading and nonjudgmental.³ See Figures 5-7 (p. 74).

Is the candidate using a checklist to methodically understand the operations or just winging it? The best checklists are simple, such as the eight wastes and 5Ms (man, method, machine, materials and measurement).

How does the candidate end the *gemba* walk? Does he or she summarize the key findings with an action plan of the top three issues, or give you his or her own opinion of what the problems are? Distinguishing between fact and opinion is critical.

4. Have the candidate conduct a single-point training lesson

Training others is one of the best ways to gauge a candidate’s domain expertise and how he or she communicates and

interacts with others. Provide a topic or tool, such as eight wastes, Pareto chart, fishbone diagram or five whys. The candidate must keep the lesson under five minutes.

Does the candidate begin with a simple learning objective or dive into the details? How does he or she engage the audience? Through stories or real examples? How well does the candidate communicate? Is his or her delivery smooth and clear? Does he or she maintain eye contact?

Does the candidate use visual aids, such as drawing on a whiteboard? Drawing is a powerful communication tool because the audience is listening and watching.⁴ How well does the candidate read the audience? In other words, does he or she pause to make sure everyone understands? Can he or she field questions from the audience in a compelling manner? Finally, is the candidate passionate about the topic or going through the motions?

5. Ask what the candidate would do in the first 90 days on the job

Asking this forward-looking question gives you the opportunity to learn how a candidate would set themselves up for success. What you’re looking for in a response is the candidate’s approach, plan and how he or she deals with uncertainty. The question is completely open ended.

Does the candidate’s plan follow a logical sequence—goals > strategies > initiatives > key milestones—or is it haphazard? Is he or she big picture, detailed oriented or both? The best candidates can seamlessly alternate from the 30,000-foot level to the six-foot level.

How does the candidate define success at the 90-day mark? Does he or she relate success on a personal level

FIGURE 6

Nonleading questions

Nonleading questions

- > Leading questions subtly prompt people to answer in a particular way.
- > They inhibit people from thinking through problem solving on their own.
- > Nonleading questions allow people to think for themselves.

Leading

> Did you try _____?

> How many [parts, orders] were [scrapped, reworked, delayed]?

Nonleading

> What have you thought about trying?

> How are you affected by the problem?

FIGURE 7

Nonjudgmental questions

Nonjudgmental questions

- > Often, judgmental questions are perceived as blaming or threatening.
- > When people feel threatened, problems tend to go "underground."
- > Nonjudgmental questions are free of intimidation.

Judgmental

> Why didn't you say something earlier about this problem?

> Why is this happening on your shift?

Nonjudgmental

> What steps did you take when you first noticed the problem?

> What do you think is contributing to the problem?

(the position and career growth), the department (departmental goals and objectives) or the organization (vision, strategic initiatives and key performance indicators)? Or does the candidate look at success from the customer's perspective? Are deliverables included, such as a current state assessment, voice of the customer, key initiatives or implementing a small improvement?

Closing words

These five ways to screen job candidates are proven, flexible (they apply to any role) and easy to use. Increase your odds of hiring the right candidate by using the forward-looking interview technique. **QP**

EDITOR'S NOTE

Visit this article's webpage at qualityprogress.com for a list of references.



Peter J. Sherman is the managing partner of Riverwood Associates LLC in Atlanta. He earned a master's degree in civil engineering from the Massachusetts Institute of Technology in Cambridge and an MBA from Georgia State University in Atlanta. From 2008 to 2011, Sherman was the lead instructor of Emory University's Six Sigma certificate program in Atlanta. A senior member of ASQ, Sherman is an ASQ-certified quality engineer, a Smarter Solution-certified Lean Six Sigma Master Black Belt and an APICS-certified supply chain professional. Sherman has served as chair of ASQ Atlanta Section 1502.