

PART I

Conducting a Front-End Analysis

CONDUCTING AN FEA involves eight sets of activities that allow you to complete the first seven steps of the Engineering Effective Performance Model. These operational activities include:

1. Document the opportunity or request.
2. Determine the nature of the opportunity or request.
3. Identify the types of information required.
4. Identify the sources of information.
5. Create the data collection tools.
6. Collect and analyze the data.
7. Select the interventions.
8. Report.

While simple enough to list, it does take some detective skills and a set of organized activities to accomplish all that is required. Every FEA has its own individual characteristics. Some can be very large and complex and require a great deal of time and resources to complete. Others may take only a day or two. Regardless of size and complexity, the same principles remain true:

- Whatever initial solution you imagine or is proposed, by the end of the FEA, it will probably change.

- Rarely are performance issues solved (performance gaps closed) with a single intervention.
- No matter how small the issue is or how time-constrained you are, you still do all eight steps. What changes, based on size and constraints/resources, is how much time you spend on each step and how thoroughly you do them.
- Let the data speak. Generally, we conduct FEAs on other people's issues. We play the role of analyst/consultant. Our power resides in our ability to influence. Our most eloquent witnesses are the credibly obtained information and data we collect, organize, and present.

An *information chart* that succinctly explains FEA follows. It presents the purpose, result, activities, time required, resources, caveats (“gottchas”), and some useful tips. Job aids are also listed along the left-hand margin. The job aids themselves are on the pages immediately following the information chart. We provide explanations and instructions on how to use each job aid.

To facilitate use of the job aids, we have included a running example. The example documents an FEA conducted in a public utility. Its purpose is to clarify use of the job aids. As the running example is a form of “case,” an explanation and background information about it are also included.

Front-End Analysis Information Chart

Purpose:	<p>Identify the business need.</p> <p>Determine human performance requirements.</p> <p>Define the gap between desired and actual performance.</p> <p>Identify factors affecting the gap between desired and actual performance.</p> <p>Identify appropriate, economical, feasible, and acceptable performance interventions.</p> <p>Determine worth and potential return on investment of performance interventions.¹</p>
Result:	<p>A report specifying performance requirements, factors affecting the performance gap, and recommended interventions for eliminating the gap.</p>

¹This will be dealt with in the Calculating Worth and Return on Investment section following Front-End Analysis.

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- Activities:** Specify in precise terms what has been requested or the opportunity you have identified.
- (Job Aid FEA-1)²* Identify, using Job Aid FEA-1, Request for Performance Support, whether what has been requested or identified is
- Mandated (regulation, policy, collective agreement).
 - New (either a new system for existing personnel or an existing system for new personnel).
 - Performance improvement (gap between current and desired or anticipated performance).
- (Job Aid FEA-2)* Determine with the help of Job Aid FEA-2, Front-End Analysis Data Requirements, what front-end analysis data are required.
- (Job Aid FEA-3.1 and 3.2)* Determine what front-end analysis data sources are appropriate. Use as a model Job Aid FEA-3.1, Front-End Analysis Data Sources, and Job Aid FEA-3.2, Front-End Analysis Data Sources: Specific Recommendations.
- (Job Aid FEA-4.1 and 4.2)* Select your data/information-gathering tools and techniques using Job Aid FEA-4.1, Data/Information Gathering Techniques.
- Create questions using Job Aid FEA-4.2, Front-End Analysis Questions, to guide you. Note that there are four different sets of questions: mandated, new system for existing personnel, existing system for new personnel, and performance improvement. Select the main set of questions on the nature of the gap. Then examine the other question sets for relevant items you should investigate. We recommend always examining the performance improvement set of questions, as this is the most comprehensive.
- As needed, collect data using the following techniques:³
- Technique 1: Surveys and Questionnaires
 - Technique 2: Observation

²The job aids referred to in the left-hand column of each information chart are located immediately following the explanation on how to use the job aids for each FEA step.

³A series of technique charts start on page 123. The technique charts explain how you can create and use each technique.

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- Technique 3: Structured Interview
- Technique 4: Focus Group
- Technique 5: Critical Incident

Analyze the data.
(Job Aid FEA-5.1 and 5.2) Determine what performance interventions (alternatives to training or additional interventions with training) are required. Use the decision matrix featured in Job Aid FEA-5.1, Performance Intervention Selection.

To set priorities and identify appropriate, economical, feasible, and acceptable interventions, use Job Aid FEA-5.2, Performance Intervention Ratings.

Calculate the worth and potential return on investment for the selected performance interventions. (See Calculating Worth and Return on Investment in Learning and Performance starting on page 85.)

(Job Aid FEA-6) Produce a report summarizing all front-end analysis data. Use Job Aid FEA-6, Front-End Analysis Report Outline, as a model.

Time Required: As this is a critical major first step before any design/development work is undertaken, it is difficult to assign a precise time allotment. Depending on the size and importance of the performance gap, a front-end analysis can run from four to more than forty days.

Consider population size and estimated value of the performance interventions. The greater these are, the more time should be invested in this step to ensure maximum return on investment.

Mandated and new systems requests require considerably less front-end analysis activity than do requests to improve performance.

Resources: Access to supervisors, relevant managers, experts, customers, and target population.

All relevant documentation.

Resource personnel, as required, to conduct surveys, statistical analyses, and documentation analyses.

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Appropriate rooms for interviews/focus groups.

Budgets for travel and communication as required.

Job Aids FEA-1 through FEA-6.

Technique Charts 1 to 5.

Caveats:

Although it is critical to ensure that training only be selected if appropriate, there is often resistance to alternatives by clients/management who have already decided that training is needed.

Clients may consider that conducting front-end analysis activities by “training personnel” is inappropriate. Eventually, you and your group must become accepted as learning and performance support specialists.

Hidden agendas, collective agreements, personal biases, and political considerations frequently influence front-end analysis activity.

This step can become a project in itself. It must be scaled to a manageable and realistic level considering resources, time, and budgets.

Tips:

Determine the amount of time, resources, and budgets required for this step. Create a front-end analysis plan scaled to resources.

Build a time and action calendar for all front-end analysis activities. Obtain approval from your supervisor and all relevant managers to proceed.

Identify all key stakeholders and interact with them in both obtaining data and reporting out.

Maintain confidentiality of data sources.

Identify the audience(s) for the front-end analysis report and address it to them.

As much as possible, let the data speak.

Your job as a professional concerned with improving workplace performance requires you to be both investigative and analytical. The investigative part applies equally to situations in which you play a proactive or reactive role. If you have clients you serve on a regular basis, over time, you become intimately aware of their operations and attuned to changes that are likely to occur. Hence, part of your role is to continually survey your clients' terrain

to identify opportunities for improving current performance or to prepare for anticipated changes. In the former case, improvement opportunities might include higher sales, more consistent quality outputs, reduced wastage, decreased error rates, improved customer satisfaction ratings, and greater productivity. In the case of preparing for anticipated changes, you might look for new product launches, new system implementation, a corporate merger or acquisition, targeting of new markets, technological changes, reorganization, downsizing or its reverse, and large scale hiring.

All of these send out signals to you. By investigating, you may discover significant opportunities for improved or altered performance. This may happen even before your clients are aware of the performance change needs.

More commonly, you are the recipient of client requests. Generally, these take the form of asking for training (please note that training is a “solution”—an intervention whose purpose is to alter or improve performance). These requests, too, may be the result of anticipated changes or dissatisfaction with current performance levels.

Instructions for Using Job Aid FEA-1: Opportunity/Request for Performance Support

Regardless of how the opportunity/problem arrives at your doorstep, the first step is to document the opportunity or request. Job Aid FEA-1, Opportunity/Request for Performance Support, helps you do this. Here is how to use it:

1. Meet with the client to discuss the opportunity or request. If the client starts by requesting a specific solution (I need a training program on . . .), the appropriate response is, “I can help you solve your problem,” accompanied by a reassuring smile. This helps the client feel that you will be of service while you do not simply take the order. Your focus will be on the client *needs* rather than on the initially expressed *wants*.



Make sure that you are dealing with the “real” client and not an intermediary. If the apparent client turns out to be a surrogate, insist on meeting the true client, especially if she or he is the ultimate decision maker.

If you are the one who has identified a performance gap, your approach will be one of indicating what you have discovered and what the implications are to the client’s organization. Once again, immediately accompanying the presentation of the performance gap (anticipated or current)

Exhibit 2.1. Broken Telephone

Client:	"My people need to learn how to answer phones. I want you to put together a four-hour class on telephone etiquette. Include lots of practice."
You:	"I certainly can help you solve your problem. Tell me what triggered this request for telephone etiquette training?"
Client:	"I've been getting complaints from inside the company and, even worse, from customers about the ways calls are being answered. The other day, I phoned one of our branches in Boston and had to wait about a dozen rings before someone answered. And she was really rude. 'One moment, please,' she snapped and then left me dangling."
You:	"Can you tell me what the impact of this situation is on the business?"
Client:	"Of course. First of all, there's an image issue. We look bad. Customers lose confidence in us. If they're treated poorly, they'll go elsewhere. I have letters to show this. Internally, it creates a bad atmosphere. Here's an example of what I mean . . ."

to the real client are your reassuring words: "I can help you solve your problem/realize your opportunity." (See Exhibit 2.1, Broken Telephone.)

2. Fill in the initial information requirements for Job Aid FEA-1. Then, together with your client, list in bulleted form the reasons for the opportunity or request. As you do this, probe to arrive at the business need behind the opportunity or request.

As the client speaks, you list the reasons. Stop occasionally to confirm your understanding.

In the case of you bringing an opportunity to the attention of a client, discuss the issue and draw out from the client what the implication might be. Drill down to the *business need*.

3. Once you have obtained sufficient preliminary information about the request, or your client has agreed that you have indeed identified the reasons for the opportunity in a credible way that links to a business need, *determine the nature of the opportunity or request*. This requires some explanation.

In workplace settings, when there is a gap or discrepancy between desired and actual performance, the usual default solution/intervention is "training." Research on human performance at work strongly indicates that training interventions are rarely sufficient to significantly improve and sustain human performance and often may not be necessary to achieve desired performance results. Hence, as a first analysis step, you

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must examine the opportunity/request, and its reasons, to determine its nature. Job Aid FEA-1 assists your thinking. It asks:

- Is this opportunity a request related to a specifically mandated decree? Is it required according to:
 - A law or regulation that specifies training or some other intervention? Transportation, utilities, pharmaceutical, and police are examples of work settings that have specified mandated interventions.
 - Company policy? The organization's policy dictates training or another intervention.
 - A senior management decision? This is a tricky one and refers to a combined decision of senior management. It does not refer to a senior manager making a decision or request. In this latter case, data may influence the senior manager's decision. The key issue in this case is how "fixed in concrete" the decision is.
 - Other unchangeable mandated requirements such as collective agreement or workplace tradition that cannot be altered?
 - Is this opportunity or request related to the introduction of a new way of doing things, a new system? Is it a/an
 - New system for existing personnel? Will people currently doing the job have to do it in new ways and/or with new tools?
 - Existing system for new personnel? In this case, others have learned and worked with this system previously, but new people, ones unfamiliar with the way it is done, now must become proficient and perform well with it.
 - Is this an opportunity or request to improve performance? Is the requirement for people to achieve better results than those they are currently attaining?
4. Based on your analysis of the reasons for the opportunity or request, check off the appropriate boxes in Job Aid FEA-1. It is possible to check off more than one box. However, indicate which is the most evident, based on the preliminary client discussion.



Job Aid FEA-1

Opportunity/Request for Performance Support

Opportunity/Request: _____

Source/Client: _____

By when: _____

Reason for opportunity/request:

Based on preliminary information, this is a request for:

- Mandated training or other intervention
 - Law or regulation
 - Company policy
 - Senior management decision
 - Other (Specify):
- New system training (lack of skills or knowledge) and/or support
 - New system for existing personnel
 - Existing system for new personnel
- Performance improvement (eliminate a gap between expected/desired and actual performance)



More than one category may be selected. However, highlight the most important one.

In Job Aid FEA-1, you documented the opportunity or request and determined its nature: mandated; new system; performance improvement. Job Aid FEA-2 helps you identify what information you will require to conduct your FEA.

Example: Voice Messaging Opportunity/Request for Performance Support

What follows is an example of a completed Job Aid FEA-1. It is for a project at an electrical utility. This establishes a pattern for the remainder of the front-end analysis portion of the toolkit. Each job aid will be followed by an example filled in from the voice-messaging project. The purpose is to provide a clear example of how you can complete the job aids.

Although this example was drawn from a real situation, it has been somewhat modified to serve a learning purpose. This should not detract from its usefulness in guiding your activities.

Voice Messaging Example**Opportunity/Request for Performance Support
(Job Aid FEA-1)**

Opportunity/Request: A course on the use of the voice messaging system for Level 1
clerks in Customer Service

Source/Client: Customer Service

By when: Prototype by October 1, 20XX

Implementation: November 1, 20XX

Reason for opportunity/request:

- *The union contract states that anyone entering a new position must receive adequate training on all aspects of the job. New first-level clerks must use the voice messaging system. Currently, we have no training on it.*
- *First-level clerks have to use the voice messaging system efficiently and independently. They are having a lot of trouble doing so. Customers and supervisors report a large number of errors.*
- *We must eliminate customer complaints about not being informed or being misinformed about power interruptions. Complaints translate into large fines for the company.*
- *Deregulation is being considered and our image with the public as well as customer satisfaction is crucial to the business.*

Based on preliminary information, this is a request for:

- Mandated training or other intervention
 - Law or regulation
 - Company policy
 - Senior management decision
 - Other: Unionized Agreement
- New system training (lack of skills or knowledge) and/or support
 - New system for existing personnel
 - Existing system for new personnel
- Performance improvement (eliminate a gap between expected/desired and actual performance)



More than one category may be selected. However, highlight the most important one.

Instructions for Using Job Aid FEA-2: Front-End Analysis Data Requirements

There are five types of data or information needed for an FEA. However, not all opportunities or requests demand all five. Job Aid FEA-2 guides you in identifying which ones. The five types of requirements are

- *Desired performance.* This includes data and information that help you define the ideal state. If people are performing perfectly, this is what they would be doing and achieving.
- *Actual performance.* This is the current state of affairs in terms of behaviors and results—where we are now.
- *Feelings.* This type of data is often forgotten. How people “feel” about desired and actual performance is essential for determining what, ultimately, must be done to eliminate the gap. Feelings include those of management, customers, peers, unions, the performers themselves, and other stakeholders.
- *Causes.* Data about “why” a gap exists help you to understand all the factors that affect that gap. These generally lead to easily identifying the means for closing the gap.
- *Solutions.* Ultimately, what you wish to draw from the FEA is a set of interventions—solutions—for attaining desired performance. Given the nature of the gap, the resources and constraints of the context, and the organizational culture and characteristics of the performers, you will derive a recommended solution or, more likely, a basket of solutions for achieving desired performance.

To use Job Aid FEA-2, do the following:

1. Identify the type of opportunity or request with which you are engaged. This comes from FEA-1 and may be mandated, a new system, or performance improvement. If it is more than one type, you will have to examine each one a little differently later. Focus on the dominant nature of the opportunity or request.
2. Check off the data requirements for this opportunity/request. The X's in the matrix identify these requirements. Notice that there are some small x's with footnote explanations. Depending on circumstances, you may or may not require this type of data.

In summary, Job Aid FEA-2 simply helps you define what you will have to look for. It helps eliminate unnecessary investigation, depending on the nature of the opportunity/request. It is a simple and quick-to-use job aid.

Job Aid FEA-2 **Front-End Analysis Data Requirements**

	Mandated	New System	Performance Improvement
Desired Performance	X	X	X
Actual Performance	x ¹	x ²	X
Feelings	X	X	X
Causes			X
Solutions		x ³	X

Data requirements for this opportunity/request include:

- Desired Performance
 Actual Performance
 Feelings
 Causes
 Solutions

1.Although training is mandated, the target population may possess relevant skills and knowledge. Data collected here will influence the amount, type, and level of training.
 2.While this is a new system, the target population may possess some relevant skills and knowledge. Data collected here will influence what type and level of training and/or support is required.
 3.For new systems proficiency, there are a limited number of solutions: training, job aids, and documentation or a combination of these.

Instructions for Using Job Aids FEA-3.1 and 3.2: Front-End Analysis Data Sources and Specific References

Let's review where we are in our front-end analysis efforts. You have done the following:

1. Documented the opportunity or request.
2. Determined the nature of the opportunity or request.
3. Identified the type of information required.

You now must identify the sources of information—where you will find what you need. This is very much like writing a term paper in college. Step 1 is documenting what the instructor requests. Step 2 is determining what kind of term paper is being assigned. Step 3 is to identify what kind of information you will have to gather. The next step is to identify all your information sources.

Job Aids FEA-3.1 and 3.2 help you do this. Job Aid FEA-3.1 is somewhat analogous to an all-purpose shopping list you might attach to your refrigerator with a magnet. It offers a wide range of categories of information with specific suggestions within each one. Here is what you will do:

Examine Resources

Start by examining appropriate sources of information for “desired performance.” Cover everything except for “desired performance” and all the related potential sources.

Look at Job Aid FEA 3.1. Notice that there are five columns of information sources. The major categories of data or information sources are (1) existing data (for example, sales figures residing in a database; files of complaint letters; inventory turn rates; cost figures); (2) documentation (for example, books; published reports; lengthy memos); (3) experts (for example, people who have many years of experience doing a job; recognized authorities; technical experts; subject-matter specialists); (4) management and customers (internal customers; external customers); and (5) target population (those targeted for improvement). These represent the major categories of information sources one goes to in an FEA.

Within each category and for each type of information required, there are options listed. Examine each of these and, with representatives of the client group, ask if each option is a likely source of useful information. Add other items as appropriate. Hence, for “desired performance,” are there any exemplary performance data, benchmark study data, or research study data available? If yes, check off the option. Repeat the process for documentation, experts, management and customers, and target population.

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Let us use an example to clarify. In the Broken Telephone case, the client had requested a training program on telephone etiquette. Through discussions with the client and her team, you might identify the sources of “desired performance” indicated by check mark as follows:

	Existing Data	Documentation	Experts	Management and Customers	Target Population
Desired Performance	<input type="checkbox"/> Exemplary performance data <input type="checkbox"/> Benchmark study data <input type="checkbox"/> Research study data <input checked="" type="checkbox"/> Local standards	<input type="checkbox"/> Research reports <input type="checkbox"/> Legal documents <input type="checkbox"/> Company manuals <input type="checkbox"/> Company reports <input checked="" type="checkbox"/> Books <input type="checkbox"/> Journal articles <input type="checkbox"/> Examples from other departments/organizations <input checked="" type="checkbox"/> Industry/government reports	<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Interviews <input checked="" type="checkbox"/> Focus groups <input checked="" type="checkbox"/> Questionnaires <input type="checkbox"/> Exemplary performer data <input type="checkbox"/> Other

Indicate the Source

Each time you place a check mark indicating a data or information source in Job Aid FEA-3.1, write a specific note or reference in Job Aid FEA-3.2 to indicate what or where the source is. As an example, there are eight items checked off in the table above. Here is what would appear in Job Aid FEA-3.2.

Existing Data	Internal standards from any branch or department (verify via e-blast)
Documentation	Standards issued by ABC telephone company Published guidelines on generally accepted practices (books on telephone etiquette)
Experts	Consultants on telephone practices: ABC telephone company Private consultants listed in ASTD Directory
Management and Customers	Two senior managers (VP level) Six branch managers
Target Populations	Interviews with random sample of branch personnel (10) Four focus groups: two branch personnel; two HQ E-mail survey to randomly sample branch and HQ personnel

Repeat the Procedure for Other Items

Repeat the same procedures above for all other required information (actual performance; feelings; causes of performance discrepancy; solutions for improving performance).



Remember: at this stage you are only identifying sources of information. Also, as you move from one type of required information to another, you should endeavor to make multiple use of each source. For example, if you are interviewing target population members on desired performance, also question them about actual performance, feelings, causes, and solutions.



Another point to remember: for actual performance, use observation and performance testing whenever feasible.

Review the Results

Once you have checked off all appropriate items, review them to select a feasible set of sources if you have too many. Balance feasibility with comprehensiveness. When you have finished, you will have identified all the information sources you require to conduct your FEA.

Job Aid FEA-3.1 **Front-End Analysis Data Sources**

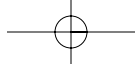
	Existing Data	Documentation	Experts	Management & Customers	Target Population
Desired Performance	<input type="checkbox"/> Exemplary performance data <input type="checkbox"/> Benchmark study data <input type="checkbox"/> Research study data <input type="checkbox"/> Other	<input type="checkbox"/> Research reports <input type="checkbox"/> Legal documents <input type="checkbox"/> Company manuals <input type="checkbox"/> Company reports <input type="checkbox"/> Books <input type="checkbox"/> Journal articles <input type="checkbox"/> Examples from other departments/organizations <input type="checkbox"/> Industry/government reports <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Exemplary performer data <input type="checkbox"/> Other
Actual Performance	<input type="checkbox"/> Sales figures <input type="checkbox"/> Accident reports <input type="checkbox"/> Call-backs <input type="checkbox"/> Complaints <input type="checkbox"/> Word back log <input type="checkbox"/> Productivity figures <input type="checkbox"/> Revenue <input type="checkbox"/> Grievances <input type="checkbox"/> Error reports <input type="checkbox"/> Other			<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Observations <input type="checkbox"/> Performance tests <input type="checkbox"/> Other
Feelings	<input type="checkbox"/> Complaints <input type="checkbox"/> Grievances <input type="checkbox"/> Other	<input type="checkbox"/> Research reports <input type="checkbox"/> Books/articles <input type="checkbox"/> Industry & government reports <input type="checkbox"/> Other		<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other

Job Aid FEA-3.1 Front-End Analysis Data Sources (continued)

	Existing Data	Documentation	Experts	Management & Customers	Target Population
Causes of Performance Discrepancy		<input type="checkbox"/> Reports <input type="checkbox"/> Books/articles <input type="checkbox"/> Industry & government reports <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other
Solutions for Improving Performance		<input type="checkbox"/> Reports <input type="checkbox"/> Books/articles <input type="checkbox"/> Industry & government reports <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other

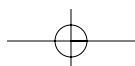
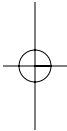
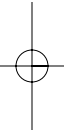
 **Job Aid FEA-3.2** **Front-End Analysis Data Sources: Specific References**

Existing Data	
Documentation	
Experts	
Management and Customers	
Target Populations	



Examples: Voice Messaging Data Sources and Specific References

In the electrical utility example on voice messaging, please note that there are not a large number of boxes checked off (20) in Job Aid 3.1. Most of these are related to interviews with management, focus groups with the target population and reviews of existing data on actual performance. The example for Job Aid 3.2 gives the specific references.



Voice Messaging Example Front-End Analysis Data Sources (Job Aid FEA-3.1)

	Existing Data	Documentation	Experts	Management & Customers	Target Population
Desired Performance	<input type="checkbox"/> Exemplary performance data <input type="checkbox"/> Benchmark study data <input type="checkbox"/> Research study data <input type="checkbox"/> Other	<input type="checkbox"/> Research reports <input checked="" type="checkbox"/> Legal documents <input type="checkbox"/> Company manuals <input type="checkbox"/> Company reports <input type="checkbox"/> Books <input type="checkbox"/> Journal articles <input type="checkbox"/> Examples from other departments/organizations <input type="checkbox"/> Industry/government reports <input checked="" type="checkbox"/> Vendor manuals <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input checked="" type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Exemplary performer data <input type="checkbox"/> Other
Actual Performance	<input type="checkbox"/> Sales Figures <input type="checkbox"/> Accident Reports <input checked="" type="checkbox"/> Call-backs <input checked="" type="checkbox"/> Complaints <input type="checkbox"/> Word back log <input type="checkbox"/> Productivity figures <input type="checkbox"/> Revenue <input type="checkbox"/> Grievances <input checked="" type="checkbox"/> Error Reports <input type="checkbox"/> Other			<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input checked="" type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Observations <input type="checkbox"/> Performance tests <input type="checkbox"/> Other
Feelings	<input checked="" type="checkbox"/> Complaints <input type="checkbox"/> Grievances <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Research reports <input type="checkbox"/> Books/articles <input type="checkbox"/> Industry & government reports <input type="checkbox"/> Other		<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input checked="" type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other

(Continued)

Voice Messaging Example

**Front-End Analysis Data Sources
(Job Aid FEA-3.1) (continued)**

	Existing Data	Documentation	Experts	Management & Customers	Target Population
Causes of Performance Discrepancy		<input type="checkbox"/> Reports <input type="checkbox"/> Books/articles <input type="checkbox"/> Industry & government reports <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input checked="" type="checkbox"/> Focus groups <input checked="" type="checkbox"/> Questionnaires <input type="checkbox"/> Other
Solutions for Improving Performance		<input type="checkbox"/> Reports <input type="checkbox"/> Books/articles <input type="checkbox"/> Industry & government reports <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other	<input type="checkbox"/> Interviews <input checked="" type="checkbox"/> Focus groups <input type="checkbox"/> Questionnaires <input type="checkbox"/> Other

Voice Messaging Example **Front-End Analysis Sources (Job Aid FEA-3.2)**

Front-End Analysis Data Sources: Specific References List of Sources for Obtaining Front-End Analysis Data	
Existing Data	Call backlogs last two quarters Complaint logs and files last two quarters Random sample of complaint letters Error report logs and files last two quarters
Documentation	PUC memorandum Fine report EUA Research Report on service interruptions and impact on public perception of utilities (see V. Singh) Vendor manuals for operating the VM system
Experts	Level two and three clerks Vendor technical experts
Management and Customers	VP Customer Service, Sales, Customer Relations Director Customer Service
Target Populations	Level-one clerks—exemplary Level-one clerks—average Level-one clerks—deficient

Instructions for Using Job Aid FEA-4: Front-End Analysis Questions

To date, you have done the following:

1. Documented the opportunity or request.
2. Determined the nature of the opportunity or request.
3. Identified the type of information required.
4. Identified the information sources.

You are now ready to collect and analyze your data and information. This involves three steps. The first is to select and create your information-gathering tools. The second is to go out and actually collect relevant information. The third involves reviewing and examining your data for root causes of performance discrepancy and/or key requirements for achieving desired performance.

Here is how you go about doing this.

1. Turn to the Technique Charts on pages 123 through 144 of this toolkit. Examine each of the information-gathering techniques you find there. As you will note, each has its advantages and drawbacks.
2. After reviewing them, examine Job Aid FEA-4.1, Data/Information-Gathering Techniques. Based on your specific project, check off those techniques that are most relevant and feasible within your environment. Bear in mind that a combination of techniques usually works best. Also note that you are not engaging in a scientific investigation. What you are looking for are the most feasible, cost-effective means for obtaining FEA information.
3. Based on your specific project, select the appropriate set of FEA questions located in Job Aids FEA-4.2.1 through FEA-4.2.4 using the decision table below:

If Your Project Is Essentially	Then Select
Mandated Training	Job Aid FEA-4.2.1
New System for Existing Personnel	Job Aid FEA-4.2.2
Existing System for New Personnel	Job Aid FEA-4.2.3
Performance Improvement	Job Aid FEA-4.2.4

4. With the appropriate set of questions selected for which you must find answers, create your data/information-collection instruments. The questions located in Job Aids FEA-4.2.1 through 4.2.4 form the basis for building your surveys, questionnaires, structured interviews, observation instruments, and so on. The data/information you gather will, in turn, allow you to respond to the job aid questions.

5. Add or delete questions in your instruments as appropriate. While the sets of questions in Job Aids FEA-4.2.1 through 4.2.4 have been tested and found to be useful in most cases, each project has its own unique nuances to which you must attend to be both accurate and complete in your FEA.
6. Refer to the following resources (See the annotated Resources section at the back of this book for additional information on these publications.) for additional assistance to create your instruments and collect and analyze your data/information:
 - Fink, A. (2002). *The survey kit* (2nd ed.). Thousand Oaks, CA: SAGE.
 - Rossett, A. (1987). *Training needs assessment*. Englewood Cliffs, NJ: Educational Technology Publications.
 - Shrock, S.A., & Coscarelli, W. C. (2000). *Criterion-referenced test development: Technical and legal guidelines for corporate training and certification* (2nd ed.). Washington, DC: International Society for Performance Improvement.
 - Zemke, R., & Kramlinger, T. (1982). *Figuring things out*. Reading, MA: Addison-Wesley.
7. Go out and collect your data/information. Record your findings in the form of responses to the questions in Job Aids FEA-4.2.1 through 4.2.4.
8. Once you have gathered all your data, synthesize your findings. Analyze the results to identify key factors affecting the attainment of desired performance. Highlight these factors.



If the nature of your project includes more than one type of opportunity or request, create your instruments so that you can respond to all relevant questions. Also, as a general rule, review the questions for performance improvement in Job Aid FEA-4.2.4, even when your project is “mandated” or “new system.” Frequently, there are factors, endemic to any performance context, that can negatively affect outcomes. It is very useful to identify these during your data/information collection.



Sometimes, due to turf wars, political agendas, or organizational issues, hidden factors may be present that could hinder achieving desired performance results. Useful questions to include, regardless of performance gap are

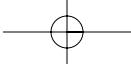
- Is there anything else I should know about this situation?
- Is there any reason why the organization would not wish to move forward with this project?
- Are there competing interests or points of view?
- Is there anything else I should be asking?

 **Job Aid FEA-4.1**
Data/Information-Gathering Techniques

Review the techniques listed below. Check off those that are appropriate, feasible, economical, and organizationally acceptable for your FEA data/information gathering. Go through all left-hand column items, checking in the right-hand column appropriate interventions. The result will be a complete set of interventions that should be implemented to achieve desired performance.

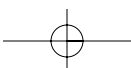
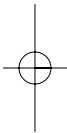
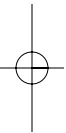
Technique	Advantages	Disadvantages	✓
Surveys and Questionnaires	<ul style="list-style-type: none"> • Large samples • Quick to administer • Easy to tabulate 	<ul style="list-style-type: none"> • Low response/return rate • Hard to create well • Superficial 	
Observation	<ul style="list-style-type: none"> • What you see is what you get • Direct/credible 	<ul style="list-style-type: none"> • Cost/time • People act differently when observed • Not always possible 	
Structured Interview	<ul style="list-style-type: none"> • In-depth • Detailed/rich • Permits probing 	<ul style="list-style-type: none"> • Cost/time • Bias/subjectivity in questioning and responding • Difficult to analyze/synthesize 	
Focus Group	<ul style="list-style-type: none"> • Efficient (compared to interviews) • In-depth • Synergy 	<ul style="list-style-type: none"> • Scheduling seven to ten people • Subjectivity in questioning and responding • Group think 	
Critical Incident	<ul style="list-style-type: none"> • Detailed and specific • Real life 	<ul style="list-style-type: none"> • Cost/time • Narrow focus • Analysis and synthesis time-consuming 	
Performance Testing*	<ul style="list-style-type: none"> • Hard data • Controlled • Performance-based 	<ul style="list-style-type: none"> • Test reactivity/anxiety • Test validity • Time/cost 	
Documentation Analysis*	<ul style="list-style-type: none"> • Available • Hard copy • Specific and detailed 	<ul style="list-style-type: none"> • Time-consuming to locate and review • Static and impersonal • Time to synthesize 	
Existing Data*	<ul style="list-style-type: none"> • Highly credible • Relatively easy to obtain • Generally easy to analyze and report 	<ul style="list-style-type: none"> • Static, requires interpretation • Subject to multiple interpretations • Often lacks context 	

*Not included in Technique Charts. See the Resources section for more information on these methods.



Example: Voice Messaging Data/Information-Gathering Techniques

See the various techniques that were employed in the Voice Messaging example before proceeding to the next job aids.



Voice Messaging Example Data/Information-Gathering Techniques (Job Aid 4.1)

Technique	Advantages	Disadvantages	✓
Surveys and Questionnaires	<ul style="list-style-type: none"> • Large samples • Quick to administer • Easy to tabulate 	<ul style="list-style-type: none"> • Low response/return rate • Hard to create well • Superficial 	
Observation	<ul style="list-style-type: none"> • What you see is what you get • Direct/credible 	<ul style="list-style-type: none"> • Cost/time • People act differently when observed • Not always possible 	✓
Structured Interview	<ul style="list-style-type: none"> • In-depth • Detailed/rich • Permits probing 	<ul style="list-style-type: none"> • Cost/time • Bias/subjectivity in questioning and responding • Difficult to analyze/synthesize 	✓
Focus Group	<ul style="list-style-type: none"> • Efficient (compared to interviews) • In-depth • Synergy 	<ul style="list-style-type: none"> • Scheduling seven to ten people • Subjectivity in questioning and responding • Group thrive 	✓
Critical Incident	<ul style="list-style-type: none"> • Detailed and specific • Real life 	<ul style="list-style-type: none"> • Cost/time • Narrow focus • Analysis and synthesis time-consuming 	
Performance Testing*	<ul style="list-style-type: none"> • Hard data • Controlled • Performance-based 	<ul style="list-style-type: none"> • Test reactivity/anxiety • Test validity • Time/cost 	✓
Documentation Analysis*	<ul style="list-style-type: none"> • Available • Hard copy • Specific and detailed 	<ul style="list-style-type: none"> • Time-consuming to locate and review • Static and impersonal • Time to synthesize 	✓
Existing Data*	<ul style="list-style-type: none"> • Highly credible • Relatively easy to obtain • Generally easy to analyze and report 	<ul style="list-style-type: none"> • Static—requires interpretation • Subject to multiple interpretations • Often lacks context 	✓

*Not included in Technique Charts.

 Job Aid FEA-4.2.1

FEA Questions—Mandated Training

Origin of Request	<ul style="list-style-type: none"> • What specifically prompted the request? • Who or what group actually initiated the request?
Reasons	<ul style="list-style-type: none"> • Why is the training necessary? • Is there a legal or collective agreement requirement for training? If not, why train? • If training already exists for this performance area, what is wrong with it? Why not update it? • Have employees previously received training for this performance area? With what results? Are any parts of previous training reusable?
Perceived Performance Discrepancy	<ul style="list-style-type: none"> • What is the desired performance? • What is the actual performance of employees? • How does actual performance differ from desired performance? • What are the symptoms and causes of the performance gap if any? • Are there any obstacles/interventions preventing employees from performing at the desired level of performance even though it is mandated?
Feelings	<ul style="list-style-type: none"> • How is the mandate perceived? • How is the current training perceived?
Target Population	<ul style="list-style-type: none"> • What are the primary and secondary populations?
Solutions/Interventions	<ul style="list-style-type: none"> • Is training actually mandated or the passing of a test? If the test/certification is the actual requirement, are alternatives to training acceptable as long as the testing requirement is met? • If training is required by mandate, does the training requirement differ by populations? If so, how? If not, should there be differences in training? • Besides training, what else can be done to bridge the gap between actual and desired performance relative to the mandate? • Who is currently responsible for providing feedback (corrective and/or confirming) and incentives/rewards/disciplinary action to employees with respect to the mandated requirements? • Could the performance of the employees be improved by adjusting certain tasks or responsibilities to reduce the mandated training requirement? How? • In order for employees to perform effectively with respect to the mandate, are all needed resources available? • How present and available are supervisors to acknowledge desired performance relative to the mandate? Do they provide suitable encouragement to conform to mandated requirements? Do they sometimes inadvertently punish desired performance?

**Job Aid FEA-4.2.2****FEA Questions—New System for Existing Personnel****Questions for Management**

- What is the new system?
- How different is the new system from the existing one?
- What background information is available about the new system?
- What documentation, support systems, or tools currently exist to facilitate building performance capability with the system? What is their quality?
- Who will be affected by this new system?
- How will this new system affect employees' tasks/responsibilities?
- What, if any, competing tasks do employees perform that will affect proficiency with the new system?
- What difficulties did personnel experience when the previous system was introduced? How were these dealt with? Is it probable that the same difficulties will reappear with the new system?
- How does management feel about the new system? How do unions feel?
- In what kind of environment will employees work with respect to the new system?
- Is this different from their current environment?
- How many employees will need to become proficient immediately? In the next two to five years?
- Who will provide training, performance support, and on-the-job monitoring and feedback?
- What is currently done to build performance capability when new systems are introduced? With what results?
- What materials/tools are currently available to help support learning and performance on the job?
- Are there foreseeable changes to the new system?

Questions for Employees

- What do you know about the new system?
- Have you had any experience with it or with a similar system?
- How do you feel about the new system?
- When you have had to become proficient on a new, similar system, what difficulties did you experience? What helped you most to overcome these difficulties? What was least helpful or even a hindrance?
- What resources and/or conditions do you feel would best help you acquire high performance capability on the new system?
- What concerns do you have about the new system?

 Job Aid FEA-4.2.3

FEA Questions—Existing System for New Personnel

Questions for Management

- What is the hiring/promotion process for this position? Will the personnel possess appropriate prerequisites?
- Who will be affected by the new systems? In what ways?
- How many new employees will have to become proficient immediately? Over the next two to five years?
- What characteristics and competencies should the ideal new employee possess coming into the job?
- What system-relevant skills are required to perform in this position?
- How do current employees presently perform? How long did it take them to become proficient?
- How long does it usually take before new employees can perform the job relatively independently—survival level?
- What are the indicators that employees are performing effectively?
- What are the indicators that employees are not performing effectively?
- What are the critical things employees need to know in order to perform the job effectively?
- What, if any, competing tasks do employees perform?
- In what kind of environment do employees work? Does the environment support maximum performance?
- How are current employees presently prepared to perform with the system?
- If training is necessary, who provides it? Who supports them on the job? Who monitors performance and provides feedback?
- What materials are currently available for training and performance monitoring/support?

Questions for Current Employees

- What exactly is your job?
- How did you learn to do the job? What helped you most? Least? Hindered your becoming proficient?
- Are there any shortcuts about the job that you learned from other employees or discovered yourself? What are they?
- Are there any support materials, even ones your colleagues created, that you consider valuable? Can we provide samples?
- How do you know if you are performing effectively?
- How do you know if you are not performing effectively?
- Are there specific criteria for evaluating job performance?
- Did you receive support as you learned to become proficient? What helped? What hindered?
- What are the key survival skills to perform with this system?

Job Aid FEA-4.2.3**FEA Questions—Existing System for New Personnel
(continued)**

- How long did it take before you really felt comfortable with the system?
- Looking back at the training you received, what additional help/information would have made working with the system easier/better?
- What did you consider a waste of time or even counterproductive?
- Were you the appropriate person for this job? If not, why not? Why were you selected?
- What obstacles to performance exist for using the system effectively?

Job Aid FEA-4.2.4

FEA Questions—Performance Improvement

General**Questions/Lead-in Questions**

- What is desired performance?
- How do employees presently perform?
- What differences are there between the expected/desired performance and the way employees presently do their jobs? Provide specific categories of performance.
- What indicators suggest that employees are not performing?
- Why is this performance discrepancy important?
- If this performance discrepancy is not addressed, what problems might occur over time?
- Are the current skills and knowledge adequate for the desired performance?



To determine cause(s) of the performance gap, ask pertinent questions about each possible contributing factor.

Lack of Skill and Knowledge

- Do employees have sufficient basic skills and knowledge to perform adequately?
- Do employees have the technical and/or specialized skills to perform well?
- Could employees perform in the past?
- How often do employees do this work?
- Is there a simpler, more effective alternative way of performing?
- Do employees have what it takes (physical or mental condition, overqualified, and so on)?
- Do employees have readily accessible, effective job aids or support tools?
- Do employees possess knowledge, skills, or attitudes that might interfere with desired performance?

Expectations and Feedback

- Do employees receive clear, unambiguous expectations of performance?
- Do employees receive clear, unambiguous feedback on how they are performing with respect to expectations?
- Do employees receive feedback that is focused on results? On behaviors?
- Do employees receive feedback that is immediate and frequent?
- Do employees receive feedback that is selective and specific?
- Do employees receive feedback that is positive and supportive?

Selection

- Do employees seem to have the desire to perform when they enter the job?
- Is employee turnover low?

Job Aid FEA-4.2.4

FEA Questions—Performance Improvement (continued)

<p>Motivation and Incentives</p>	<ul style="list-style-type: none"> • Are there clear selection criteria in place? • Are employees selected based on these criteria? • Does the hiring process focus on performance capability? • What skills, knowledge, characteristics, and values are essential for the position? Do employees who are selected possess these? How is this verified? • Do employees value the desired performance? • Do employees feel confident they can perform? • Are employees sufficiently challenged to perform without feeling overwhelmed or threatened? • Are employees recognized and rewarded for performing as desired? • Are employees ever punished for performing as desired? • Is the pay for the job competitive? • Are there significant bonuses and raises based on good performance? • Are there any meaningful non-pay incentives for good performance? • Are employees rewarded for <i>not</i> performing?
<p>Job Design</p>	<ul style="list-style-type: none"> • Are procedures efficient and designed to avoid unnecessary steps and wasted motion? • Are procedures based on sound methods? • Are work tasks appropriate to the job and employee skill level?
<p>Task Interference</p>	<ul style="list-style-type: none"> • Are there any obstacles preventing employees from performing? Conflicting priorities? Unclear expectations? Lack of authority? Restrictive policies? Emotional limitations? Lack of strength and dexterity? Incompatible tasks? Inaccessible data?
<p>Environmental Design</p>	<ul style="list-style-type: none"> • Is the environment (physical, administrative, social, emotional) designed to encourage productive behaviors? • Are work conditions comfortable and free of unnecessary interference and obstacles? • Are there specific obstacles (physical, administrative, social, emotional) that decrease productivity?
<p>Information/ Resources/Tools</p>	<ul style="list-style-type: none"> • Do employees have ready access to information necessary to perform? • Are there adequate resources/tools, procedures, and guidelines available to do the job well? • Are the resources sufficiently tailored to the job and easily available? • Are the necessary tools/equipment to perform the job readily available? • Are they reliable?

Job Aid FEA-4.2.4 (continued)**Technical and
Management
Support**

- Are they efficient?
- Are they safe?
- Are they compatible with other resources and tools?
- Are there sufficient and readily accessible data/support systems to direct an experienced person to perform well?
- Is there sufficient and accessible technical support by appropriate specialists?
- Are good models of behavior available?
- Are clear and measurable performance standards communicated so that people know how well they are expected to perform?
- Do supervisors and managers acknowledge and support superior performance?

Examples: Voice Messaging Front-End Analysis Questions

The example of the electrical utility voice messaging project was specifically selected because it has shades of all three types of problems discussed earlier. Training for new hires to a position is mandated by the collective agreement. The voice messaging system is also new for those who have never used it. Most importantly, it is a performance improvement project, because even those who have worked with it are making an unacceptable number of errors.



As a result, we have responded to all of the questions in Job Aid FEA-4.2, parts 1, 3, and 4. This is rather unusual. We have done this to model how questions would be answered for mandated, new system, and performance improvement. For most cases that you will encounter, you should focus on one set and then scan the others for additional relevant questions.

Voice Messaging Example FEA Questions—Mandated Training (Job Aid FEA-4.2.1)

- | | |
|--------------------------|--|
| Origin of Request | <ul style="list-style-type: none"> • What specifically prompted the request?
<i>Customer complaints.</i> • Who or what group actually initiated the request?
<i>The request for training originated in Customer Service.</i> |
| Reasons | <ul style="list-style-type: none"> • Why is the training necessary?
<i>First-level office clerks are not using the voice messaging system effectively and the clerks are making errors by misinforming customers of power interruptions. In addition, the turnover rate of clerks is fairly high and therefore there is a constant need for training.</i> • Is there a legal or collective agreement requirement for training? If not, why train?
<i>Yes. The collective agreement requires training when an employee enters a new position. Due to turnover, we have to train new first-level office clerks.</i> • If training already exists for this performance area, what is wrong with it? Why not update it?
<i>With a new version of the software having been distributed to the commercial offices, Customer Service is presently examining how to update the software documentation as well as ways to overcome the clerks' problems.</i>
<i>While the training has been primarily lecture-oriented in a classroom setting, employees have indicated a marked preference for individualized instruction rather than lecture. The current training provides little opportunity for clerks to practice because the classroom is not equipped with voice messaging systems or any terminals. Participants therefore do not get to practice with the system's operating procedures during training.</i> • Have employees previously received training for this performance area? With what results? Are any parts of previous training reusable?
<i>Some employees did not receive training before they were asked to call customers. This is in violation of the collective agreement. Previous training has been mostly lecture with no practice. Employees experience frustration and high error rates. Customers are furious. Previous training appears to have been poor with little reusability potential.</i> |

(Continued)

Voice Messaging Example

FEA Questions—Mandated Training
(Job Aid FEA-4.2.1) (continued)**Perceived
Performance
Discrepancy**

- What is the desired performance?
To perform their jobs properly, clerks must be able to use the computer so they can quickly and accurately select the customers to be called. They must then be able to start up the automatic call mechanism, ensure the system is functioning, and print a detailed report of the calls that have been made.
- What is the actual performance of employees?
Employees find it difficult to use the software. They make errors and frequently call on experienced colleagues for help.
- How does actual performance differ from desired performance?
High error rate. High customer complaints. PUC fines for poor and error-ridden practice.
- What are the symptoms and causes of the performance gap if any?
Wrong customers contacted. Customers who should be contacted not included in contact list. Time and date errors. Inarticulate or incomplete messages.
Causes are multiple: lack of basic keyboard and computer skills; inappropriate candidates selected, inadequate documentation; some literacy issues; some clerks do not speak clearly; the system is difficult to use; inadequate training and guided practice with feedback; occasional errors in work orders.
- Are there any obstacles/interventions preventing employees from performing at the desired level of performance even though it is mandated?
Employees do not have support materials (for example, a reference manual) to which they can refer post-training. Supervisors are not always available or sufficiently skilled to help when problems arise. There is no adequate technical support.

Feelings

- How is the mandate perceived?
The union and clerks feel that more and better training should be given. Management is not enthusiastic because of time off the job, cost, and need to replace trainees.
- How is the current training perceived?
Ineffective by everyone. No hands-on.

Target Population

- What are the primary and secondary populations?
The primary population is first-level office clerks with a 20 to 30 percent annual turnover rate. The secondary population is temporary clerks with a turnover rate approaching 100 percent

Voice Messaging Example

(Job Aid FEA-4.2.1) (continued)

**Solutions/
Interventions**

annually. Total number of current Level 1 clerks both permanent and temporary is approximately 300.

- Is training actually mandated or the passing of a test? If the test/certification is the actual requirement, are alternatives to training acceptable as long as the testing requirement is met?
The training is mandated. Testing is not required or even permitted under the collective agreement. Alternatives are acceptable with training.

- If training is required by mandate, does the training requirement differ by populations? If so, how? If not, should there be differences in training?

No. They all do the same job.

- Besides training, what else can be done to bridge the gap between actual and desired performance relative to the mandate?

Develop tools to support clerks on the job (job aids, reference manual, hot line). Give more hands-on practice before turning the clerks loose.

- Who is currently responsible for providing feedback (corrective and/or confirming) and incentives/rewards/disciplinary action to employees with respect to the mandated requirements?

First-line supervisors.

- Could the performance of the employees be improved by adjusting certain tasks or responsibilities to reduce the mandated training requirement? How?

Unlikely. Informing customers of service interruptions is a clerical job and part of the accepted job description. The task is not complex. The system is not intuitive.

- In order for employees to perform effectively with respect to the mandate, are all needed resources available?

All the equipment and databases are available. If a clerk runs into difficulty, there is no support.

- How present and available are supervisors to acknowledge desired performance relative to the mandate? Do they provide suitable encouragement to conform to mandated requirements? Do they sometimes inadvertently punish desired performance?

Supervisors have many tasks to perform. They also do not know how to use the system. They are not very available to acknowledge performance or encourage. When complaints come in, they "make scenes" and insist on improvement, especially when managers' bonuses are threatened or fines are levied on the company.

Voice Messaging Example

FEA Questions—Existing System for New Personnel
(Job Aid FEA-4.2.3)**Questions for Management**

- What is the hiring/promotion process for this position? Will the personnel possess appropriate prerequisites?
This is a unionized environment with bumping. New clerks will not necessarily have appropriate prerequisites. Approximately 80 percent have some prerequisite deficiencies.
- Who will be affected by the new systems? In what ways?
Customers, especially commercial ones. Customer service managers whose bonuses depend on efficient customer service and low complaints. Customers who anticipate shutdowns that do not occur or who experience unexpected interruptions lose money and time.
- How many new employees will have to become proficient immediately? Over the next two to five years?
About 10 to 20 per month over the next five years.
- What characteristics and competencies should the ideal new employee possess coming into the job?
Strong clerical skills. Good reading and math skills. Basic computer literacy. Knowledge of how the power company operates. Ability to read and locate electrical addresses.
- How do these differ from reality?
Most clerical workers come from other jobs—usually from the field—where there are cutbacks. There is little (15 percent) hiring from outside. Most of the internal recruits have none or few of the prerequisites.
- What system-relevant skills are required to perform in this position?
Database search skills; setting up a voice messaging list; communications skills; basic computer use skills.
- How do current employees presently perform? How long did it take them to become proficient?
Current employees perform poorly. Over time and with coaching, they become more proficient. On average, approximately four to five months are required for proficiency. About 20 percent never “get it.”
- How long does it usually take before new employees can perform the job relatively independently—survival level?
Four to six tries for about 30 percent. Seven to ten tries for most others. About 20 percent do not achieve independence. Errors continue to occur for several months for most clerks.

Voice Messaging Example

(Job Aid FEA-4.2.3) (continued)

- What are the indicators that employees are performing effectively?
100 percent accuracy in setting up and sending out power interruption messages to the right customers 48 hours prior to service interruption. No customer or PUC complaints.
- What are the indicators that employees are not performing effectively?
Angry calls from customers complaining about unexpected service interruptions or no interrupted service when announced. Fines. Nasty memos from management. Negative newspaper articles.
- What are the critical things employees need to know in order to perform the job effectively?
The characteristics and capabilities of the voice messaging system. How the system works. Procedures for creating call lists and messages. Procedures for sending messages. Creating clear, comprehensible voice messages. System troubleshooting.
- What, if any, competing tasks do employees perform?
Clerks perform a wide range of customer service tasks, mostly in support of customer service agents. The job is relatively routine and defined. Competing tasks are not an issue.
- In what kind of environment do employees work? Does the environment support maximum performance?
Clean, safe environment. Business office atmosphere.
- How are current employees presently prepared to perform with the system?
Rudimentary, classroom training with little hands-on practice. The voice messaging module is one of many.
- If training is necessary, who provides it? Who supports them on the job? Who monitors performance and provides feedback?
Career instructors do the training. They are drawn from the experienced employee ranks, but are not always up-to-date on current practice. There is little on-the-job monitoring. Supervisors provide feedback when something goes wrong.
- What materials are currently available for training and performance monitoring/support?
The only available materials are the system documents, mostly written as reference materials by the vendor's technical writers.

(Continued)

Voice Messaging Example

FEA Questions—Existing System for New Personnel
(Job Aid FEA-4.2.3) (continued)**Questions for****Current Employees**

- What exactly is your job?
First-level clerk. Support customer service and customer service agents. Perform all clerical support tasks.
- How did you learn to do the job? What helped you most? Least? Hindered your becoming proficient?
Some classroom training (70 percent). Mostly on-the-job from other experienced clerks. Learned best by doing and getting help from more experienced workers. Classroom training helped some, but was not very related to the actual job. What hindered most was getting yelled at for not getting the job done right, even though there was not a lot of guidance or support. There seems to be a constant threatening atmosphere. Lots of pressure.
- Are there any shortcuts about the job that you learned from other employees or discovered yourself? What are they?
Trying out systems, equipment, tasks on my own and watching what happens. Watching experienced people and not doing things they suggested were unimportant.
- Are there any support materials, even ones your colleagues created, that you consider valuable? Can we provide samples?
None.
- How do you know if you are performing effectively?
The supervisor leaves you alone.
- How do you know if you are not performing effectively?
Getting yelled at.
- Are there specific criteria for evaluating job performance?
Not sure. Level of complaints and fines are strong indicators of performance.
- Did you receive support as you learned to become proficient? What helped? What hindered?
Not much support after training except from helpful experienced clerks. What helped was trial and error with someone more experienced giving feedback. What hindered was lack of structured, hands-on preparation for the job.
- What are the key survival skills to perform with this system?
Listen, watch, and go slowly. Ask questions and check with experienced people.

Voice Messaging Example

(Job Aid FEA-4.2.3) (continued)

- How long did it take before you really felt comfortable with the system?
About eight months to a year. (This is particularly significant in light of the fact that there is very high turnover in the position.)
- Looking back at the training you received, what additional help/information would have made working with the system easier/better?
Better training. Lots of practice. Support from knowledgeable or technical people when you get stuck.
- What did you consider a waste of time or even counterproductive?
Long, boring lectures, lots of useless technical terms, and long, confusing demonstrations.
- Were you the appropriate person for this job? If not, why not? Why were you selected?
Uncertain. Due to union rules, they were eligible. Many feel that they are only marking time until they can get back to the field. Working with office systems is not seen as positive or of high personal value.
- What obstacles to performance exist for using the system effectively?
Poor or insufficient training. Poor reference materials to help when you have problems. Not much support or clear direction. Always under threat if someone with more seniority comes along. Position not highly valued by those who have lost their field jobs.

Voice Messaging Example

FEA Questions—Performance Improvement
(Job Aid FEA-4.2.4)**General
Questions/Lead-
in Questions**

- What is desired performance?
Timely and accurate messages to all affected customers concerning power shutdowns due to repair or maintenance at least 48 hours prior to shutdown. No errors in announcement messages or contents. No complaints due to inaccuracies in messages or timing.
 - *Messages and contacts made in conformance with time and quality standards for Level I clerks.*
 - *No fines or adverse publicity due to errors and/or complaints about repair and maintenance power shutdown announcements.*
- How do employees presently perform?
Very unevenly. They have difficulty operating the voice messaging system, particularly the computerized database portion. There is a 15 percent error rate, high customer complaint rate, and excessive PUC fines. There are also complaints about the quality of announcements delivered via the voice messaging system.
- What differences are there between the expected/desired performance and the way employees presently do their jobs?
Provide specific categories of performance.
Expectations are 100 percent accuracy in announcing service interruptions. Ease of use of the voice messaging system without assistance.
- What indicators suggest that employees are not performing?
First-level office clerks take a lot of time to program the voice messaging system. They also make errors by misinforming customers of power interruptions.
- Why is this performance discrepancy important?
For customers: Loss of time; loss of money and additional expenses (commercial customers); inconvenience.
For the company: Angry complaints and bad press. As this is a monopoly utility, public pressure for competition, PUC fines.
For management: Loss of bonuses.
For clerks: Inconvenience, frustration, rework, punishing comments from supervisors, possible loss of job.

(Continued)

Voice Messaging Example

(Job Aid FEA-4.2.4) (continued)

- If this performance discrepancy is not addressed, what problems might occur over time?

Customer complaints about not being informed or being misinformed of power interruptions will not be reduced or eliminated. (Complaints may even increase because of the high turnover rate of clerks). Customer calls must be answered promptly or government fines are levied on the company. Complaint calls consume enormous amounts of customer service agent time. Could contribute to deregulation. Customer Service has a responsibility to notify clients about power interruptions scheduled by the company. If this discrepancy is not addressed, they can be potentially liable to fines. Lack of information about scheduled shutdowns taint the company's reputation. The current political, regulatory, and consumer climate requires the company to pay great attention to customer needs.

- Are the current skills and knowledge adequate for the desired performance?

In general, no. Approximately 25 percent feel competent. New clerks have great difficulties becoming competent.



To determine cause(s) of the performance gap, ask pertinent questions about each possible contributing factor.

Lack of Skill and Knowledge

- Do employees have sufficient basic skills and knowledge to perform adequately?

Many do not understand system basics and feel ill-prepared for this task. Some can barely use a keyboard.

- Do employees have the technical and/or specialized skills to perform well?

Although most of the clerks are familiar with the computer, they have never used a complex voice messaging system like this before. They are unfamiliar with database searching for electronic addresses, list creation, and message sending/verification of receipt.

- Could employees perform in the past?

No.

- How often do employees do this work?

Daily. Minimally twice a week.

- Is there a simpler, more effective alternative way of performing?

No. Unfortunately, the voice messaging system is not user-friendly.

(Continued)

Voice Messaging Example

FEA Questions—Performance Improvement
(Job Aid FEA-4.2.4) (continued)**Expectations and
Feedback**

- Do employees have what it takes (physical or mental condition, overqualified, and so on)?
Uncertain. As testing is not permitted (collective agreement) and selection is mostly by seniority, no formal means are used to verify competencies or aptitudes. There are some indications of low literacy (15 to 20 percent).
- Do employees have readily accessible, effective job aids or support tools?
No. Only vendor manuals.
- Do employees possess knowledge, skills, or attitudes that might interfere with desired performance?
As many have come into the business office from the field, they may perceive office work as having less value than field work. This is essentially an attitude issue.

- Do employees receive clear, unambiguous expectations of performance?
Only in general terms: "Inform customers of the power shutdown and don't make mistakes."
- Do employees receive clear, unambiguous feedback on how they are performing with respect to expectations?
Only in general terms when there are complaints.
- Do employees receive feedback that is focused on results? On behaviors?
On results, yes, but only when there are complaints. Nothing on behavior.
- Do employees receive feedback that is immediate and frequent?
Erratic and emotional.
- Do employees receive feedback that is selective and specific?
Yes on results, but not on process.
- Do employees receive feedback that is positive and supportive?
No. Employees feel that their supervisors are not interested in this task and have "dumped" it on them. Supervisors rarely monitor clerks or provide much feedback until a problem occurs.

Selection

- Do employees seem to have the desire to perform when they enter the job?
Mostly yes. Some are resentful of having been bumped out of a higher status field job (20 percent). Some lack confidence about clerical work (20 percent).

(Continued)

Voice Messaging Example

(Job Aid FEA-4.2.4) (continued)

- Is employee turnover low?
Very high. For full-time first-level clerks, 20 to 30 percent annually. For temporary clerks (about 50 percent of the first-level clerk population) 100 percent annually. This may increase with continued downsizing.
 - Are there clear selection criteria in place?
No. Seniority and some general criteria are used.
 - Are employees selected based on these criteria?
Generally yes. However, in remote or smaller communities, some favoritism affects selection.
 - Does the hiring process focus on performance capability?
No.
 - What skills, knowledge, characteristics, and values are essential for the position? Do employees who are selected possess these? How is this verified?
Basic literacy and numeracy skills. Minimum grade 10 education level. Basic computer skills are a plus. There are no means for verifying characteristics and values. It is uncertain how much of the skills and knowledge selected employees possess. Interviews are largely superficial. Seniority plays a major role.
- Motivation and Incentives**
- Do employees value the desired performance?
Varies. 50 percent yes; 50 percent no.
 - Do employees feel confident they can perform?
Varies. 40 percent yes to somewhat; 60 percent little to no confidence. Longevity in the job is a factor in increasing confidence.
 - Are employees sufficiently challenged to perform without feeling overwhelmed or threatened?
Many tasks are routine. The voice messaging system creates a strong challenge to the point of overwhelming.
 - Are employees recognized and rewarded for performing as desired?
No.
 - Are employees ever punished for performing as desired?
No.
 - Is the pay for the job competitive?
Yes, although with decrease in status and job, there is a corresponding decrease in pay.

(Continued)

Voice Messaging Example

FEA Questions—Performance Improvement
(Job Aid FEA-4.2.4) (continued)

	<ul style="list-style-type: none"> • Are there significant bonuses and raises based on good performance? <i>No. Although the managers receive a bonus for maintaining high customer service ratings, neither the supervisors nor their employees receive any rewards. There appears to be no incentive in place for supervisors to train their employees.</i> • Are there any meaningful non-pay incentives for good performance? <i>No.</i> • Are employees rewarded for <i>not</i> performing? <i>Not rewarded, but not punished except for negative verbal comments from supervisors.</i>
Job Design	<ul style="list-style-type: none"> • Are procedures efficient and designed to avoid unnecessary steps and wasted motion? <i>Given the relatively difficult voice messaging system the company selected, yes.</i> • Are procedures based on sound methods? <i>In general, yes.</i> • Are work tasks appropriate to the job and employee skill level? <i>Tasks are suited to the job level. Not all clerks are sufficiently skilled.</i>
Task Interference	<ul style="list-style-type: none"> • Are there any obstacles preventing employees from performing? Conflicting priorities? Unclear expectations? Lack of authority? Restrictive policies? Emotional limitations? Lack of strength and dexterity? Incompatible tasks? Inaccessible data? <i>Emotional limitations: employees don't find the system user-friendly and do not understand it. They are very negative about the voice messaging system and feel completely frustrated by its apparent complexity.</i>
Environmental Design	<ul style="list-style-type: none"> • Is the environment (physical, administrative, social, emotional) designed to encourage productive behaviors? <i>Physically, yes. However, downsizing has had a strong impact on morale. This is a company with a long history of growth and no layoffs that is now radically downsizing due to external pressures.</i> • Are work conditions comfortable and free of unnecessary interference and obstacles? <i>Yes.</i> • Are there specific obstacles (physical, administrative, social, emotional) that decrease productivity? <i>No, except for some emotional (loss of previous job; fear of being bumped).</i>

(Continued)

Voice Messaging Example

(Job Aid FEA-4.2.4) (continued)

**Information/
Resources/Tools**

- Do employees have ready access to information necessary to perform?
Yes. Somewhat difficult to access with the current system.
- Are there adequate resources/tools, procedures, and guidelines available to do the job well?
No. There are no adequate tools in place to help clerks perform their jobs effectively. A vendor-supplied technical manual is available, but most of the clerks do not understand the jargon in it and therefore only refer to it as a last resort.
- Are the resources sufficiently tailored to the job and easily available?
The manuals are poor and the system is complex.
- Are the necessary tools/equipment to perform the job readily available?
Yes. However, vendor manuals are not very readable.
- Are they reliable?
Yes, if they can comprehend them.
- Are they efficient?
No.
- Are they safe?
Yes.
- Are they compatible with other resources and tools?
Yes.

**Technical and
Management
Support**

- Are there sufficient and readily accessible data/support systems to direct an experienced person to perform well?
No. The materials for guiding system use are technical, wordy, and unclear.
- Is there sufficient and accessible technical support by appropriate specialists?
No. There are no technical support persons.
- Are good models of behavior available?
Yes. Experienced clerks. However, they are generally busy.
- Are clear and measurable performance standards communicated so that people know how well they are expected to perform?
In a general way: 100 percent accuracy; no customer complaints. None related to system use.
- Do supervisors and managers acknowledge and support superior performance?
No.

Instructions for Using Job Aid FEA-5: Performance Intervention Selection

At this point, you have completed the following steps:

1. Document the opportunity or request.
2. Determine the nature of the opportunity or request.
3. Identify the type of information required.
4. Identify the information sources.
5. Create information-gathering tools.
6. Collect and analyze information.

You now move on to selecting appropriate performance interventions to achieve desired results. As mentioned earlier, once an accurate diagnosis of the situation has been completed, selecting interventions is a relatively easy task. To accomplish this, the following two job aids (Job Aids FEA-5 and FEA-6) provide assistance.

1. Thoroughly review all the data/information you collected in the previous step. Based on this information, examine the items in the left-hand column of Job Aid FEA-5.1, Performance Intervention Selection, one at a time. If your data/information indicates that the item is true, check off the accompanying intervention in the right-hand column.

For example: Based on the analysis, your data/information clearly indicates that performers lack certain skills and knowledge essential for the job. However, while doing the job, they may refer to reference materials and performance support tools. Performance expectations are clearly defined and communicated, as are performance standards. Unfortunately, performers do not receive timely and specific information on how well they do their work.

The partially completed sample of Job Aid FEA-5.1 on the next page shows what a pattern of your job aid would look like.

Conducting a Front-End Analysis

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If performers	Consider	
Lack skills or knowledge essential for the job	training	<input checked="" type="checkbox"/>
Lack job-relevant skills or knowledge but may refer to readily accessible information, procedures, decision tables, or information systems to perform at desired levels	job aids	<input checked="" type="checkbox"/>
Lack clear performance expectations	setting performance expectations	<input type="checkbox"/>
Lack clear performance standards	setting performance standards	<input type="checkbox"/>
Lack timely information on how well they are performing	feedback systems	<input checked="" type="checkbox"/>

2. The number of boxes checked off may be overwhelming. In this case, you have to set some priorities as to which subset of these will work within your setting. This leads to Job Aid FEA-5.2, Performance Intervention Ratings. Here is how you set priorities with this job aid:

- In the “Intervention” column, list the interventions you checked off for consideration in Job Aid FEA-5.1.
- Apply a 4 to 0 scale as you rate each intervention in terms of appropriateness, economics (cost), feasibility (resources required, constraints, time), organizational acceptability, and individual (performer) acceptability. The scale works as follows:
 - 4 = excellent fit
 - 3 = good fit
 - 2 = poor fit
 - 1 = very poor fit
 - 0 = not possible (a single “0” rating eliminates the intervention)
- Total up the score for each intervention.
- Rank order the interventions, eliminating any that have even one “0.” This is a fatal flaw and means “do not implement” even if the other ratings for the intervention are high.
- Retain those interventions that have the highest scores and together offer a high probability of success.

The example that follows, using a completed Job Aid FEA-5.1, shows what the matrix in FEA-5.2 might look like completed.

Intervention	Appropriateness	Economics	Feasibility	Organizational Acceptability	Individual Acceptability	Total	Rank	Retain (✓)
Training	4	2	3	2	4	15	3	✓
Job Aids	4	4	4	4	4	20	1	✓
Feedback Systems	4	3	2	3	4	16	2	✓
Provision of Resources	3	1	1	1	3	9	4	
Incentives/Consequences	3	0	0	2	4	9	5	

The “basket of interventions” you ultimately retain is the combination that has the highest likelihood of being accepted and supported by decision-makers.

 Job Aid FEA-5.1

Performance Intervention Selection

Based on the data collected during the Front-End Analysis, identify recommended solutions:

If performers	Consider
Lack skills or knowledge essential for the job	training <input type="checkbox"/>
Lack job-relevant skills or knowledge, but may refer to readily accessible information, procedures, decision tables, or information systems to perform at desired levels	job aids <input type="checkbox"/>
Lack clear performance expectations	setting performance expectations <input type="checkbox"/>
Lack clear performance standards	setting performance standards <input type="checkbox"/>
Lack timely information on how well they are performing	feedback systems <input type="checkbox"/>
Lack appropriate prerequisite skills, knowledge, background, or personal characteristics to rapidly meet performance levels	selection <input type="checkbox"/>
Face interference that discourages or prevents desired performance	elimination of task interference <input type="checkbox"/>
Have to work outside the accepted way the job has been structured to achieve desired performance levels	job redesign <input type="checkbox"/>
Face organizational obstacles (structural, communications, climate, administrative, infrastructure) that inhibit performance	organizational redesign <input type="checkbox"/>
Face physical obstacles or dangers that inhibit performance	environmental redesign <input type="checkbox"/>
Work with inefficient processes that inhibit desired performance	process redesign <input type="checkbox"/>
Are not meaningfully rewarded or are even punished for desired performance or do not perceive the reward system as fair and equitable	incentives/consequences <input type="checkbox"/>
Do not value the desired performance, do not feel confident they can perform, or do not feel challenged to perform	motivation systems <input type="checkbox"/>
Lack required tools, materials, supplies, or support systems	provision of resources <input type="checkbox"/>

Job Aid FEA-5.1

Performance Intervention Selection (continued)

Lack access to information necessary to perform
 Are not encouraged or supported by supervisors
 or management
 Are not supported by appropriate specialists

provision of information
 increased management support
 increased technical support



Add to the list of inhibiting factors as appropriate. Most performance gaps have more than one inhibiting factor and therefore require more than one intervention.

 **Job Aid FEA-5.2** **Performance Intervention Rating**

Intervention	Appropriateness	Economics	Feasibility	Organizational Acceptability	Individual Acceptability	Total	Rank	Retain (✓)

Assign a rating of 0 to 4 for each intervention and each dimension:

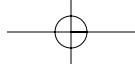
4 = excellent fit

3 = good fit

2 = poor fit

1 = very poor fit

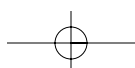
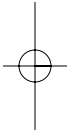
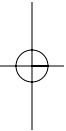
0 = not possible (a single "0" rating eliminates the intervention)



Examples: Voice Messaging Performance Selection and Rating

Based on the findings documented in Job Aids FEA-4.2.1 through 4.2.4, what follows are the selected interventions for the voice messaging example. Review the content of the findings to see how these lead to the interventions that have been checked off.

Then the FEA team, in consultation with the client group, arrived at a workable basket of solutions with which to move forward. The final recommended interventions are checked off in the sample of Job Aid FEA-5.2. Priority was given to the interventions ranked 1 through 4.



Voice Messaging Example Performance Intervention Selection (Job Aid FEA-5.1)

Based on the data collected during the Front-End Analysis, identify recommended solutions:	
If performers	Consider
Lack skills or knowledge essential for the job	training <input checked="" type="checkbox"/>
Lack job-relevant skills or knowledge, but may refer to readily accessible information, procedures, decision tables, or information systems to perform at desired levels	job aids <input checked="" type="checkbox"/>
Lack clear performance expectations	setting performance expectations <input type="checkbox"/>
Lack clear performance standards	setting performance standards <input type="checkbox"/>
Lack timely information on how well they are performing	feedback systems <input checked="" type="checkbox"/>
Lack appropriate prerequisite skills, knowledge, background, or personal characteristics to rapidly meet performance levels	selection <input checked="" type="checkbox"/>
Face interference that discourages or prevents desired performance	elimination of task interference <input type="checkbox"/>
Have to work outside the accepted way the job has been structured to achieve desired performance levels	job redesign <input type="checkbox"/>
Face organizational obstacles (structural, communications, climate, administrative, infrastructure) that inhibit performance	organizational redesign <input type="checkbox"/>
Face physical obstacles or dangers that inhibit performance	environmental redesign <input type="checkbox"/>
Work with inefficient processes that inhibit desired performance	process redesign <input type="checkbox"/>
Are not meaningfully rewarded or are even punished for desired performance or do not perceive the reward system as fair and equitable	incentives/consequences <input checked="" type="checkbox"/>
Do not value the desired performance, do not feel confident they can perform, or do not feel challenged to perform	motivation systems <input checked="" type="checkbox"/>
Lack required tools, materials, supplies, or support systems	provision of resources <input checked="" type="checkbox"/>
Lack access to information necessary to perform	provision of information <input type="checkbox"/>
Are not encouraged or supported by supervisors or management	increased management support <input checked="" type="checkbox"/>
Are not supported by appropriate specialists	increased technical support <input checked="" type="checkbox"/>

Voice Messaging Example Performance Intervention Rating (Job Aid FEA-5.2)

Intervention	Appropriateness	Economics	Feasibility	Organizational Acceptability	Individual Acceptability	Total	Rank	Retain (✓)
Training	4	3	3	3	4	17	2	✓
Job Aids	4	4	4	4	4	20	1	✓
Feedback Systems	4	3	3	3	3	16	3	✓
Selection*	4	3	0	4	0	11		
Incentives/Consequences	3	3	1	2	3	12	7	✓
Motivation Systems	3	3	3	3	2	14	5	✓
Provision of Resources**	4	0	0	0	4	8		
Increased Management Support	3	3	2	2	3	13	6	✓
Increased Technical Support	4	2	2	3	4	15	4	✓

Assign a rating of 0 to 4 for each intervention and each dimension:

- 4 = excellent fit
- 3 = good fit
- 2 = poor fit
- 1 = very poor fit
- 0 = not possible (a single "0" rating eliminates the intervention)

*Collective agreement/union issues require long-term resolution.
 **No budget or plan to modify current system.

Instructions for Using Job Aid FEA-6: Front-End Analysis Report Outline

We now arrive at the final step in the FEA process. As a review, here are the seven steps you have already accomplished:

1. Document the opportunity or request.
2. Determine the nature of the opportunity or request.
3. Identify the information required.
4. Identify the information sources.
5. Create information-gathering tools.
6. Collect and analyze information.
7. Select interventions.

To this, you can now add the eighth step: Report.

How lengthy your report should be is a decision you make based on the audience to whom you are reporting and their needs. You can report out using a set of slides with key points or use a formal report format with considerable detail and appendices. Job Aid FEA-6, Front-End Analysis Report Outline, accommodates any scale or type of report.

1. Organize all your FEA materials according to the outline. For each content section, beginning with “Origin and Reasons for Initial Request,” create a set of bullet points. These will not only help with the writing of the report, but can be reused as slide presentation points. Continue through to the end of “Recommendations” in the same manner.
2. Write brief paragraphs to present and explain each bullet point. Back up your points with data you can include in appendices. This is where your data/information-collection instruments and what you have discovered go. The text of the report summarizes key findings. The appendices provide the details.
3. Carefully review all your FEA report materials to delete people’s names. Maintain confidentiality and anonymity unless you have obtained signed permissions to use people’s names.

4. Before writing your report, review your bullet-point outline with your client group. Do this to verify accuracy of observation, technical vocabulary, completeness, and accuracy of job tasks and titles. The purpose is to verify accuracy and completeness, not to change findings, conclusions, and recommendations for political or personal reasons (although careful language may be required in the report). Take notes and modify your outline as required.
5. If time permits, review your draft report with key stakeholders for accuracy and correct language prior to “formally” presenting it.
6. Create an introduction and brief overview of the situation that sets the stage for the main body of the report. Use the sample Voice Messaging FEA Report that follows Job Aid FEA-6, Report Outline, as a model for doing this.
7. Complete your report using the appropriate amount of detail, the right style of discourse, and correct vocabulary for your audience. Consider whether or not the culture is a reading culture, whether it is analytical, or whether bullet points on a projected slide are most valued. Use analogies and examples that are meaningful to the audience. Add life to the opening section on “Origins and Reasons for the Request” with examples or a business case. The written or spoken form of your report must be clear, brief, and compelling.

 Job Aid FEA-6

Front-End Analysis Report Outline

Introduction:	Provide a brief explanation of what the report contains.
A Brief Overview of the Situation:	Provide a background summary of the context, the situation, and the issues.
Origin and Reasons for Initial Request:	Source of request/client Date of request Description of initial request Population(s) affected by the request
Problem or Opportunity Description:	Type of problem/opportunity (for example, mandate, new system, performance improvement) Specific desired performance outcome Actual performance, if any Characterization of the performance gap
Methodology:	Interviews, documentation, observation Constraints in conducting the FEA
Findings and Conclusions:	Include results of data collection, causes of performance discrepancy, and results of worth analysis
Recommendations:	Draw from Job Aid FEA-5.2 listing training, feedback, and so forth, including specific details with each recommendation
Appendices:	Include as required

Example: Voice Messaging Front-End Analysis Report Outline

The sample report that follows is relatively brief. Please note that the text of the report completely follows the Job Aid FEA-6 outline. This sample, based on the electrical utility voice messaging example content, should act as a base model for your own FEA reports.



Although priorities were previously established with respect to the interventions in Job Aid FEA-5.2, all of the selected interventions appear in the recommendations. In this case, the client preferred to present all of them so that they are documented for possible future discussion (management-union) and attention.

Voice Messaging Example

Front-End Analysis Report Outline (Job Aid FEA-6)

Introduction:

This report presents a summary of the results obtained from a front-end analysis of employee performance—specifically first-level clerks—in the Customer Service Division of [a large utility company]. Specifically, this report deals with the use of the voice messaging system. It focuses on five points: (1) the origin and reasons for the request, (2) the problem situation, (3) the methodology employed, (4) the results obtained, and (5) recommended solutions.

A Brief Overview of the Situation:

In 200X, the technical experts in Customer Service were looking for a tool that would make it possible to rapidly notify all clients affected by a power interruption scheduled by the utility. A voice messaging system was selected. Within a few months in 200X, the system was implemented throughout all commercial offices.

The voice messaging system consists of a telephone and an intelligent terminal linked to the mainframe computer. The system is computer-based and runs from software purchased and subsequently adapted by the company. Customer Service is responsible for the adaptation and implementation of the software, employee training, and performance evaluation. It is also responsible for the results.

The employees who use this system are first-level office clerks, who have little experience with voice messaging systems and, therefore, are ill-prepared for this technology. There are about 300 of these Level 1 clerks. Many (80 percent) are in the job because other jobs in the company are being closed. This is a unionized environment with job bumping. Most of the employees are uneasy with the voice messaging system. They find it constraining and frightening. According to the employees, the software, in particular, is complex and not user-friendly. The vendor-supplied manuals, of which there are very few, are difficult to understand.

During implementation in 200X, technical instructors trained the office clerks. The training, supplied on demand, lasted one working day. Once the employees completed their training and were back on the job, they supposedly could receive assistance by calling one of the technical instructors. Due to restricted budgets, this post-training help was not implemented. The employees must have experienced numerous difficulties once they returned to the workplace, as the instructors received many complaints. Some of the instructors used personal time to help out. It should be stressed that training took place in conference rooms where there was neither a computer terminal nor a voice messaging system. Participants could not practice with the system's

(Continued)

Voice Messaging Example**Front-End Analysis Report Outline
(Job Aid FEA-6) (continued)**

operating procedures while they were learning them. As mentioned above, technical instructor support was very quickly withdrawn due to company budget cuts.

In September 200X, a new version of the software was developed and distributed to the commercial offices. Customer Service is looking into the possibility of updating the software documentation and searching for ways to overcome the clerks' problems. The belief is that the new version is easier to use and more intuitive for new clerks.

Origin and Reasons for Initial Request**Source of Request/Client:**

The request for the creation of a training program comes from Customer Service. One of this service's main responsibilities is to notify clients about power interruptions scheduled by the company. By informing its customers in advance, the company can limit the inconvenience suffered by its customers and thereby improve its image. Power interruptions can cost commercial customers large sums of money and result in time and productivity losses.

Date and Description of the Request:

In August 200X, the manager of Customer Service asked the training manager to find a solution to the problem of the performance and training of clerks.

The client requested help to (1) ensure both the proper use of the voice messaging system and the quality of its messages; (2) be able to train an employee in a classroom or, if need be, in the employee's workplace in less than three hours; and (3) provide the necessary support to employees who experience difficulties.

Populations Affected by the Request:

There are three groups affected by this request: (1) managers responsible for notifying customers about a service interruption; (2) supervisors of the office clerks; and (3) office clerks who use the voice messaging system to record and make calls to customers. Approximately 50 percent are full-time and 50 percent are temporary/occasional.

Description of Problem or Opportunity**Type of Problem:**

It is a problem that affects current personnel, but is especially important for new personnel. The aim is to give current personnel the support required to improve their work performance, but even more importantly, to make it easier for new personnel to learn the system as well as provide them with the support required to use it as efficiently as possible. New personnel must

Voice Messaging Example**(Job Aid FEA-6) (continued)****Specific Desired
Performance
Outcome:**

come up-to-speed rapidly. Power interruptions for scheduled maintenance or repair occur almost daily somewhere throughout the territory.

To provide excellent service, the utility must make sure that every customer is called at the appropriate time. The telephone message must be clear and unambiguous. To do the job properly, clerks must use the computer that enables them to select quickly and accurately the customers to be called. This involves electrical address database inquiry. The clerks must record a clear, courteous, intelligible telephone message. They must then start up the automatic call mechanism, make sure that the system is working, and print a detailed report of the calls made.

Actual Performance:

New employees, despite the training they receive, find it difficult to use the software. They struggle with the databases and the sorting of electrical addresses. They often call the technical instructors for help. When they are not available, the clerks manage as well as they can by trial and error or by coaxing an experienced clerk to assist. Consequently, the clerks have developed a negative attitude toward their work and the voice messaging system.

**Characterization
of the Performance
Gap:**

The gap between desired and actual performance can be summed up in two points. First, first-level office clerks are not using the voice messaging system to its capacity. Second, the clerks are making errors by misinforming customers of power interruptions or not informing all affected customers. The gap has been identified by Customer Service management as urgent given the current political and economic environment. The gap is universally spread out across all regions and districts. Almost half the first-level clerks are having difficulty with the voice messaging system. Customer complaints are frequent. There is an estimated 15 percent error rate, which some knowledgeable persons suggest is very conservative. Besides the impact on customers' perceptions of service, annual costs in terms of rework, response to customer complaints, and fines are estimated at \$1,854,000 (average cost of deficiency rework \$12; average cost of a complaint \$48; estimated frequency of deficiencies 50,000; number of complaints 8,000; fines levied \$870,000 including legal fees).

Factors affecting the performance gap include:

- Lack of skills and knowledge to perform all necessary voice messaging tasks

(Continued)

Voice Messaging Example**Front-End Analysis Report Outline
(Job Aid FEA-6) (continued)**

- Lack of usable, efficient support tools and job aids
- Lack of timely and specific feedback on performance
- Lack of appropriate prerequisite skills, knowledge, background, and characteristics to rapidly meet performance requirements (for almost 80 percent of the clerks)
- Inadequate rewards for performance
- Low value attributed by clerks to the task; low confidence to perform well
- Unfriendly system (although the new software may be somewhat more usable); poor support materials
- Lack of supervisory and management support and encouragement
- Lack of technical support when difficulties arise

Methodology:

To gather information on the request, a performance support specialist interviewed the head of Customer Service, seven managers, and eight supervisors. In addition, he ran focus groups with four (seven per set) sets of clerks. Finally, he observed ten clerks using the voice messaging system (performance testing).

On average, interviews lasted 40 minutes. The focus group sessions lasted about an hour. The observation session lasted 30 minutes per clerk.

The performance support specialist also reviewed all relevant system support documentation, training materials, and sample complaint letters.

**Findings and
Conclusions:**

Meetings with the managers revealed that a Customer Service priority objective is to improve the company's image in the eyes of its customers. To meet this objective, the company is offering managers a salary bonus that varies according to the number of customer complaints. Managers have a vested interest in getting their supervisors to notify as many customers as possible about power outages accurately and on time.

The supervisors feel pressured to notify their customers. It must be emphasized, however, that they do not receive a bonus. Notifying customers is only one of their responsibilities. On the other hand, they are permitted to delegate this task to their office clerks. This is what occurs.

Voice Messaging Example**(Job Aid FEA-6) (continued)**

New clerks frequently receive no training in voice messaging before they are asked to notify customers. Also, they are often given this task at the last moment. As a result, clerks feel that their supervisors are not doing their jobs when they ask clerks to notify customers. The employees find voice messaging difficult to use. They claim it is not user-friendly. Finally, as a rule, clerks cannot fall back on a dependable resource to help them use the system.

During observation, six out of ten clerks experienced difficulties setting up and executing a power outage announcement.

To sum up, there are seven main contributing causes to the problem:

1. Supervisors exhibit little interest in calling customers.
2. Often, employees are trained without hands-on practice or receive no training before they are asked to call customers; they lack skills.
3. The software is not user-friendly.
4. The clerks lack the resources to help them perform well.
5. The clerks receive little useful feedback to help improve performance.
6. There are few incentives for clerks to perform well.
7. Selection of clerks is not based on appropriate prerequisites.

Recommendations:

To solve the problems described above, the following interventions are proposed:

- Integrate an introductory, hands-on course in voice messaging into clerical basic training.
- Develop an individualized, hands-on course that can be taken by clerks in their workplace. Once self-instruction is completed, the course material should also serve as a reference source (include job aids).
- Create a simple feedback system that allows clerks to monitor their performance with the voice messaging system.
- Review criteria for selection to the job. Discuss with unions the implications of poor selection. Cite turnover figures.
- Create non-monetary, yet meaningful rewards for performance improvement.

(Continued)

Voice Messaging Example**Front-End Analysis Report Outline
(Job Aid FEA-6) (continued)**

- Create an orientation to the clerk's job that stresses the value of dealing with and helping customers. Underscore the clerk's role as a company ambassador to the public.
- Improve the usability of the system.
- Create support tools.
- Provide incentives for supervisors to coach their clerks to evaluate their own performance and to support the clerks when they use voice messaging.
- Create a hotline for clerks to call for technical assistance with the voice messaging system.

A Closing Note on Front-End Analysis

If you have arrived at this point, then you have successfully completed all eight steps of a Front-End Analysis. Congratulations! Two key points remain for discussion:

1. Presentation of FEA findings and recommendations is very important. Here, we are referring to the “how” more than to the “what.” Some key points to keep in mind are
 - Prepare your clients and other audience members in advance. Review key findings and conclusions with important stakeholders during draft stages of the report. The degree of formatting and depth of your report and presentation depends on the size and importance of the project.
 - Highlight key findings, conclusions, and recommendations. Include, in brief, your methodology to describe breadth and depth. Do not go into detail unless requested.
 - Distribute a high-level summary of the FEA, but have all your detail in reserve. Provide complete report copies to those who want all the detailed information.
 - Create a priority approach set of recommendations so as not to overwhelm your clients and other audience members.
 - If feasible, offer a preliminary action plan with time lines and estimated costs.
2. Present projected cost details and return-on-investment calculations. This is becoming increasingly necessary in the world of business, where demand for business cases is the norm. This also leads us into the second part of this toolkit, which focuses on calculating worth and return on investment (ROI) in learning and performance projects. Working through the next part will permit you to demonstrate—with numbers—the worth of proceeding with the recommendations of your FEA, the potential ROI and, once the project has been implemented, actual ROI.

On the following pages are four examples of FEAs presented in summary form. Review these to note the range of performance gaps and intervention strategies.

Four Front-End Analysis Examples

This section contains four FEA cases in very different work organizations: the military (navy); a hospital; a railway; and an insurance company. The issues are also very different: improved examination performance; quality customer service; workplace equity; and centralized customer service, respectively.

The FEA reports are greatly condensed. Only the key points are included to present the broad range of FEA application. All the cases are authentic. The names of the organizations have been altered for confidentiality purposes. In all cases, the initial request was for some form of “training.”

The Navy: FEA Report in Brief

The Navy was experiencing a 70 percent failure rate among Maritime Surface and Subsurface (MARS) officers tested for their command qualifications. Of the thirteen exams, the highest failure rate was on the exam covering collision avoidance regulations and the “rule of the road.” The Navy invests \$2 million in the training and development of each naval officer. Most candidates have an engineering degree and a minimum of six years of shipboard experience. The Navy requested that a performance support team create refresher training (preferably in the form of a game) to address the problem. Their report is shown in Exhibit 2.2.

Exhibit 2.2. Brief Overview of Navy FEA

Origin and Reasons for Initial Request	
Source:	Fleet School Deputy Commandant
Description of Initial Request:	Provide refresher training for MARS officers
Population:	All MARS officers who are preparing to take their command qualifications examinations
Description of Problem or Opportunity	
Type of Problem/ Opportunity:	Performance improvement
Specify Desired Performance Outcome:	Significantly reduce the failure rate of MARS officers on Nav 4 (Collision Avoidance and Rules of the Road) Bring success rate in line with other exams
Actual Performance:	Success rate of 30.3 percent based on an analysis of fourteen exam sittings (1,057 candidates) over a six-year period In 43 percent of the sittings, Nav 4 results ranked worst of the four command navigation exams

Exhibit 2.2. (continued)

<p>Characterization of the Performance Gap:</p>	<p>Of the thirteen required command exams, results on the Nav 4 exam ranked worst or second to worst 62 percent of the time</p> <p>Naval officers at all levels who passed the Nav 4 exam expressed a lack of confidence in whether they would pass again if re-tested</p> <p>Knowledge in collision avoidance and rule of the road and ability to pass the associated naval command exam are unacceptable</p> <p>Failure rates in the Nav 4 exam hold back otherwise qualified candidates</p> <p>Uncertainty about ability to qualify if re-tested among “qualified” naval officers</p>
<p>Methodology:</p>	<p>Structured interviews with Fleet School authorities, instructors, and students, as well as qualified naval officers</p> <p>Analysis of existing reports and analysis of existing test data</p> <p>Observation of naval classes</p>
<p>Constraints:</p>	<p>Budget limitations</p> <p>Ambitious deadlines</p>
<p>Findings and Conclusions:</p>	<p>Large gap between the nature of the collision avoidance and rule of the road basic examinations taken early in the officers’ careers and the command exam</p> <p>Little formalized training between the basic and command examination levels</p> <p>Study guidelines for the Nav 4 Command Exam thin compared to the detail provided for other content areas</p> <p>Feedback on examination results confined to “pass/fail”</p> <p>In sea work-ups, relevant feedback on collision avoidance and the rule of the road sometimes withheld</p> <p>Extensive time gap between initial training on collision avoidance and rule of the road content and sitting for the Command Examination, where proficiency is officially verified</p> <p>Despite importance, officers never again required to re-qualify on collision avoidance and rule of the road once officers have passed exams and qualified</p> <p>No immediate consequences for not passing the Nav 4 Command Examination</p> <p>No single resource dedicated to proficiency maintenance on collision avoidance and rule of the road for naval personnel to access for practice regardless of posting</p>

(Continued)

Exhibit 2.2. Brief Overview of Navy FEA (continued)

	<p>Collision avoidance and rule of the road content difficult to retain due to abstract and highly detailed language</p> <p>No compiled set of collision avoidance and rule of the road references, organized and accessible to naval personnel</p>
Recommendations:	<p>Based on the findings, the study team offered ten recommendations:</p> <ol style="list-style-type: none"> 1. Reevaluate the basic course and examinations. Increase application and judgment practice where necessary. 2. Reevaluate the Nav 4 Command Exam to ensure that it truly verifies required proficiency. 3. Reevaluate the pass mark to determine if it is too stringent or not stringent enough. Adjust it to reflect proficiency requirements relative to the criticality of content. 4. Provide specific feedback to test takers. 5. Require examination candidates to demonstrate satisfactory levels of preparedness to commanding officers prior to being registered for exams. 6. Provide rewards to those who pass the Navy Command Examination on the first attempt. 7. Provide computer-based, self-study collision avoidance and rule of the road refresher practice. 8. Create comprehensive proficiency maintenance guidelines for officers. Include easily accessible resources. 9. For visual recognition content, design flash cards, both hard copy and electronic. 10. Require periodic collision avoidance and rule of the road testing/retesting.
Final Note:	<p>Refresher training was only one of the recommendations. The team developed a proficiency maintenance game called "High Seas" for the Navy. Naval officers and naval officer candidates used it to stay current and prepare for command examinations. Other NATO navies later adopted it.</p>

Southwestern Medical Center (SMC): FEA Report in Brief

Southwestern Medical Center was experiencing both financial and operational difficulties that it believed to be in large part caused by poor customer service. Management contacted HSA requesting customer service training for their 1,200 employees. Their FEA report is shown in Exhibit 2.3.

Exhibit 2.3. Brief Overview of Southwestern Medical Center FEA

Origins and Reasons for Initial Request	
Sources:	Director of Human Resources
Description of Initial Request:	Provide "off the shelf" or inexpensively create custom customer service training
Population:	Approximately 1,200 employees, including customer contact, doctors, nurses, lab technicians, maintenance, and others
Description of Problem or Opportunity	
Type of Problem/ Opportunity:	Performance improvement
Specific Desired Performance Outcome:	Improved feedback from in-patients and out-patients on their experiences at SMC Decrease in customer complaints escalated to higher levels of management Higher retention of key medical personnel and the patients they bring to the facility Increase in number of patients and services performed
Actual Performance:	Feedback from in-patients and out-patients variable. Complaints include unprofessional treatment, long waits, excessive paperwork, insensitivity to family requirements, difficulty getting around the facility, dirty bathrooms, and other issues Steady and dramatic loss of key medical doctors to neighboring hospitals, taking patients with them; feedback from exiting medical doctors suggest their needs not being met; not supported as required due to a weak administration Unfavorable publicity in local media regarding the declining facility Serious decline in revenue
Characterization of Performance Gap:	Service to patients and doctors poor, therefore resulting in steady decline in patients and revenues Customer complaints increased Unfavorable press
Methodology:	Interviews with personnel in all departments, including department heads and doctors, patients, visiting family and friends, and hospital volunteers Review of hospital customer service feedback questionnaires obtained from all patients over a one-year period Observation of facility (restrooms, signage, cafeteria, reception area, parking facilities, and so on) and personnel at work over a five-day time period

(Continued)

Exhibit 2.3. Brief Overview of Southwestern Medical Center FEA (continued)

Constraints:	<p>Very low budget</p> <p>High sense of urgency</p>
Findings and Conclusions:	<p>Findings grouped under eleven headings:</p> <p>Patients/Visitors Expectations/Perceptions:</p> <ul style="list-style-type: none"> • Indication that patients and visitors had reasonable customer service expectations and in general a high opinion of the hospital. Criticism focused mainly on confusing signs, poor building maintenance, and inadequacy of waiting and parking areas. <p>Customer Service:</p> <ul style="list-style-type: none"> • Implicit sense that SMC should provide quality customer service (QCS) from senior management to front-line employees. However, QCS vaguely defined and priority varied by department. • Frequent management changes impacted perceived priority of customer service. <p>Customer Service Training:</p> <ul style="list-style-type: none"> • High comprehension by managers of what QCS should be, however difficult communicating it to employees. • Discrepancies between managers' and employees' expectations about employees' conduct. • Managers received no customer service training, nor did their employees. No perceived need by employees for customer service training. • Employee behaviors suggest that knowledge and ability to apply QCS standards was highly variable. Employees often used judgment to adapt policies and procedures to meet QCS standards. No guidelines for conflicting customer service demands (customer-patient versus customer-doctor). • Physicians clearly recognize the hospital staff customer service shortcomings, but are not aware of their inadequacies. • Physicians' low awareness of SMC attempts to improve QCS. • Lines of communication with respect to QCS unclear. • Volunteers' job descriptions and performance standards were specific and well-defined. Volunteers also received one-on-one customer service training. • Patients and visitors rated SMC highly in terms of QCS. They did have trouble navigating through the hospital and getting answers to billing queries. They were unaware of many hospital services.

Exhibit 2.3. (continued)

Customer Service Feedback:

- No systematic procedures for measuring and communicating feedback on service provided to patients, visitors, physicians, or others. Managers felt they gave feedback; employees felt they only learned when they did something wrong.

Customer Service Incentives:

- Rarely did a letter of commendation or a disciplinary note for customer service behaviors find its way to an employee's file.
- Productivity/census measures at SMC a disincentive for QCS.
- Special recognition programs not well-designed, communicated, or implemented and, on occasion, produced negative results; general sense that even if you were an exemplary performer you did not receive significant raises and could even be laid off.

Customer Service Task Interference:

- Computer interface problems resulting in duplication of effort, loss of information, and slower customer service. Recurrent registration procedures created additional employee work and had an impact on QCS for patients.

Customer Service Staffing:

- Customer service negatively affected by staff reductions in some areas.
- Use of registry personnel as opposed to full-time employees viewed by some as having a negative impact on QCS.
- Need for more volunteers.
- Customer service skills not part of employee selection criteria.

Equipment and Furnishings:

- Some equipment old and unsafe; some furnishings shabby.
- Poor placement of equipment contributed to inconvenience and noisy conditions.
- Telephone placement distanced employees from patients.
- Inefficiencies in locating documentation and an untidy appearance resulting from cramped files and storage facilities.

Facilities/Appearance:

- Difficulties resulting from building layout.
- Inadequate and confusing signage.

(Continued)

Exhibit 2.3. Brief Overview of Southwestern Medical Center FEA (continued)

- Parking areas not clearly marked, nor viewed as “safe” by employees.
- Some waiting areas small and not well-laid-out. Conferences between physicians and family members could be overheard by strangers. Some areas required refurbishing.
- Identification of medical personnel by visitors and patients difficult as well as unclear and non-friendly message to patients resulting from employee uniforms and badges.
- Restrooms frequently untidy.
- Cafeteria tables sometimes not cleared and cleaned.
- Vending machines in waiting areas requested.

Special Needs:

- Inadequate number of wheelchairs at the right locations and too few porters.
- No assigned parking for patients with special needs.
- Alternative language services virtually unavailable.

Internal Customer Service:

- Employees not treated as customers by other hospital departments.
- Departments did not always treat other departments requesting service as customers.
- Institutional treatment of employees as customers weak (poor shuttle service, after hours security).

Recommendations:

Based on the findings, the learning and performance support team offered ninety-eight recommendations presented under the same eleven headings as in Findings above. Most of the recommendations had little to do with customer service “training.” The team proposed a wide variety of interventions of a non-training nature. Examples of these are

- Review all hospital signage and create a coherent and consistent method, color scheme, and standard set of icons for directing patients and visitors around the hospital building and grounds.
- Clean hallways and, especially, public restrooms more frequently.
- Convert the “meditation room,” which is underused, to a private meeting area for doctors and patients and family members.

Exhibit 2.3. (continued)

- Define “Quality Customer Service” in operational terms, along with standards of performance and metrics.
- Align expectations of quality customer service between managers and employees.
- Develop a set of guidelines for Quality Customer Service for physicians. Involve physicians in the creation of guidelines. Develop a communication plan for disseminating guidelines.
- Develop a set of systematic procedures for providing feedback to employees on their levels of customer service. Make them positive in nature.

North American Railway: FEA Report in Brief

North American Railway faced both internal and government pressure to eliminate discrimination in the workplace and create openness to diversity. The railway responded to the pressure by creating a request for proposal for employment equity training and sending it to a short list of training consulting organizations. Brief results from the FEA are shown in Exhibit 2.4.

Exhibit 2.4. Brief Overview of North American Railway FEA

Origin and Reasons for Initial Request	
Sources:	Vice President, Industrial Relations
Description of Initial Request:	Create a training program to sensitize management employees to employment equity issues. Teach them how to increase hiring and promotion figures for women, visible minorities, aboriginal people, and persons with disabilities. Train management to eliminate discriminatory practices in the workplace.
Population:	Approximately 4,000 management and supervisory employees
Description of Problem or Opportunity	
Type of Problem/ Opportunity:	Performance improvement
Specific Desired Performance Outcome:	Employment figures to reflect general population demographics proportionately
Outcome:	Reduction/elimination of Human Rights incidents

(Continued)

Exhibit 2.4. Brief Overview of North American Railway FEA (continued)

Actual Performance:	<p>Hiring and promotion rates for women, visible minorities, aboriginal people, and persons with disabilities very low, for example, females make up only 7 percent of the workforce and only three women out of 100 in the key management group (all lawyers)</p> <p>Increasing number of Human Rights violations resulting in incident reports, costly legal expenses, and high financial settlements</p>
Characterization of the Performance Gap:	<p>Steady differences between actual and desired levels of employment, promotions and Human Rights violations; no improvement in the past twenty years, despite continued pressure from the government to improve employment equity figures in both hiring and promotional practices</p> <p>Human Rights incidents at an all-time high, resulting in publicized racial tensions, cases of sexual harassment, and other issues, in North American Railway</p> <p>Government grants for work being withheld because of inadequate equity practices</p>
Methodology:	<p>Over thirty structured interviews with executives, industrial relations, and human resource personnel, union representatives, and various employees</p> <p>In addition to one pilot meeting, nineteen focus group meetings in five cities; focus group participants included senior managers, middle managers, front-line supervisors, personnel officers, unionized employees, women, visible minorities, aboriginal people, and persons with disabilities</p> <p>Attitude questionnaires to the 145 employees who participated in the focus groups</p> <p>Visits to five benchmark companies</p> <p>Analysis of 134 documents</p>
Constraints:	<p>Budget limitations</p> <p>Four-month deadline for completion of FEA report</p> <p>Union involvement essential</p>
Findings and Conclusions:	<p>Findings grouped under eight headings:</p> <p>Industrial Relations:</p> <ul style="list-style-type: none"> • Firm commitment to employment equity, human rights, and workplace diversity • Recognition by interviewees of unacceptable North American Railway equity practices; need for proactivity

Exhibit 2.4. (continued)

Senior Management:

- Generally open and favorable to non-discriminatory environment in hiring, promotion, and treatment of people
- Despite commitment to improve the situation, lack of awareness of details
- Employment equity not a priority; however, willing to support initiatives

Benchmarking:

- Creation of a strong information base required as a first step
- Identification of a senior management champion essential
- Creation of clear objectives with accountability, guidelines, procedures, monitoring, and coaching, as well as systematic follow-up, necessary

Unions:

- Skepticism about company's initiatives to eliminate discrimination and promote greater diversity
- Concerns that company's past record of doing the minimum to comply with the law would continue
- Equity issues considered uninteresting by several unions with exclusively male membership

Hiring and Promotion:

- Practices tied to longstanding traditions
- No system-wide approaches to these activities
- Focus on not contravening the law

Costing:

- Direct costs related to formal human rights complaints approximately \$1 million annually and rising

Current Initiatives:

- Number of initiatives in operation raised employees' consciousness
- Demonstrable results, however, limited
- Quantitatively little change in the diversity of the workforce over last several decades
- Current efforts characterized as earnest but weak

(Continued)

Exhibit 2.4. Brief Overview of North American Railway FEA (continued)

Questionnaires and Focus Groups:

- Overall attitudes toward designated groups varied mostly as a result of being a white male
- White males tended to view women, visible minorities, and aboriginal people more negatively than others did
- Women appeared to be most open and accepting of all groups
- Focus group meetings revealed deep sense of cynicism from groups with respect to company commitment toward making the workplace equitable and fair

Recommendations:

Based on the findings, the study team offered 59 recommendations. Some examples are

- Create a clearly defined policy on employment equity and communicate this to every part of the company
- Strengthen the current Employment Equity Manager position and increase resources to support it (specific recommendations to follow)
- Make changes to the Company Code of Business Ethics (specific recommendations to follow)
- Name a senior manager as champion of employment equity; must be on the management committee and be accountable for employment equity practices throughout the company
- Include employment equity practices and issues in all company training; ensure that all documents used in training and for communication represent the diversity of the company (specific recommendations and examples to follow)
- Create a management-union committee focused on employment equity issues and practices
- Purchase or redesign safety gear to fit women

Consolidated Life Insurance: FEA Report in Brief

Due to recent restructuring, sales representatives at Consolidated Life Insurance no longer provide service; they only sell policies. Service is provided through a newly created centralized customer service department. The new system rolled out by region across the country. Customers and field personnel had numerous complaints. Brief results from the FEA are presented in Exhibit 2.5.

Exhibit 2.5. Brief Overview of Consolidated Insurance FEA

Origin and Reasons for Initial Request	
Source:	Senior Vice President, Administration
Description of Initial Request:	Improve centralized client service function; upgrade skills, where appropriate
Population:	Central client service staff and management
Description of Problem or Opportunity	
Type of Problem/ Opportunity:	New system for existing personnel; performance improvement
Specific Desired Performance Outcome:	No interruption to client service from decentralized to centralized; seamless transition Same quality and timeliness of service as before change Fewer complaints from clients about the timeliness, accuracy, and completeness of response, no perceived distance between client and service provided (centralized agents currently viewed as "strangers" unfamiliar with the needs and "uniqueness" of client) Fewer client service employee complaints due to rework, overwork, frustration, having to deal with client and field hostility, as well as internal blockages and lack of access to key information Fewer complaints from field sales agents about the "treatment" of their clients by centralized client services personnel
Actual Performance:	Delays, inaccuracies, depersonalized service Complaints from client services personnel, clients, and sales agents demonstrate new centralized client services function not producing desired results, and in fact, creating new problems
Characterization of the Performance Gap:	What was planned to be increased efficiency and effectiveness turned out to be the opposite Poor service to clients, client complaints to sales agents and client services personnel, job dissatisfaction.
Methodology:	Interviews with personnel in the centralized client services department, key executives, field sales representatives, as well as personnel in interfacing departments Observation of the client services department at work, on the phone, at their desks, interfacing with employees in other departments, and in files and record rooms Physical inspection of the work environment Review of a report created to explain the initial vision of how the client services organization should be structured and operate

(Continued)

Exhibit 2.5. Brief Overview of Consolidated Insurance FEA (continued)

Constraints:	<p>Very low budget</p> <p>Very short timeline</p>
Findings and Conclusions:	<p>Findings grouped under fifteen headings:</p> <p>Lack of clarity of expectations:</p> <ul style="list-style-type: none"> • Mandate for client services not clearly defined • Management, sales representatives, personnel in client services and elsewhere in the organization alike have unclear expectations from this new function <p>Lack of clarity of the nature of the task:</p> <ul style="list-style-type: none"> • Incomplete view of the complexity and diversity of the total inventory of tasks subsumed under the umbrella title of "client services" resulting from the initiation of the centralization effort • Branch transfers of files inconsistent in terms of their condition and uniqueness of procedures and records for each branch <p>Inadequate staffing and staff organization:</p> <ul style="list-style-type: none"> • Disintegration of recommended team approach. Alternative strategies including assignment of some generalists, some specialists, and some personnel to specific regions not particularly effective <p>Staffing inequities:</p> <ul style="list-style-type: none"> • High number of employees performing jobs for which they had not been graded • Discomfort and additional obstacles to the implementation resulting from perceived inequities and inappropriate status of some staff members <p>Poorly designed and organized telephone system:</p> <ul style="list-style-type: none"> • Heavy reliance on telephone communication by client services; existing telephone system inadequate and of poor quality <p>Lack of equipment:</p> <ul style="list-style-type: none"> • Basic tools (such as computer terminals) to perform client services tasks not available in sufficient quantity <p>Filing system inadequacies:</p> <ul style="list-style-type: none"> • Lack of consistency in the way client plans filed • Centralization of files in one very tight area with limited access to cabinets and drawers; filing support inadequate

Exhibit 2.5. (continued)

Lack of systematic training and development of personnel:

- Corporate orientation program for new employees non-existent
- Skill and knowledge deficiencies in product knowledge, time management, stress management, listening skills, and leadership development

Problems related to transfer of plans:

- Inefficient maintenance of initial timetable created for transferring plans from branches to headquarters
- Increasing reports of client concerns about impersonal, distant client service

Problems related to mailings:

- Mailings prepared manually, time-consuming, and labor intensive
- Mailings also complex, often resulting in omitted pieces in some packages

Physical space constraints:

- Area for entire client services and filing room located outside the department—very tight

Lack of feedback and reinforcement:

- Aside from occasional client thank-you's and caring reinforcement from client services administrator, little reward or feedback on performance provided from management to their staff

Problems of interaction with branches and other departments:

- Much of the unevenness of interactions and strained relations with administration stemmed from lack of clarity of expectations from client services and its staff

Lack of consistent management attention of client services area:

- Supervision uneven and by persons not fully knowledgeable of the operations
- Lack of political clout in obtaining needed system changes and resources

Inadequacies in client training and client administration manuals:

- Client training highly variable, depending on salesperson or branch
- No system for training clients to administer their plans; manuals not current, nor easy to use

(Continued)

Exhibit 2.5. Brief Overview of Consolidated Insurance FEA (continued)

Recommendations:	<p>Based on the findings, the FEA team offered sixty-two recommendations presented under the same fifteen headings as in Findings. It is important to note that in the area of client services training there were ten recommendations. Examples of recommendations are</p> <ul style="list-style-type: none">• Define clearly the mandate for Client Services• Specify clear expectations for the new centralized client services function and for each job position within it• Conduct job and task analyses for the entire function and for each job position• Redesign client service teams to deal with specific regions to accommodate regional differences in laws, regulations, cultures, language issues, and unique requirements• Conduct a study of job grades and classifications as a preliminary step to eliminating perceived inequities and inappropriate status of staff members• Upgrade the quality of the telephone system• Institute a cross-training program between client services and specific functional areas
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Transition to Calculating Worth and Return on Investment in Learning and Performance

You have now completed all this toolkit has to offer on FEA. You possess the tools, the guidance and counseling, the examples, and the cautions to expect success when you venture out on your first—or next—FEA.

As you enter into the next part of the toolkit, please bear in mind that you will still be involved in FEA in one of two ways. Either you have selected your recommended interventions and must now make an economic case to demonstrate the worth of implementing your proposed interventions along with their associated costs or you have followed up on your FEA, implemented the interventions, and now must show valued results. Both cases demand a rigorous accounting of costs and value. That's what the next part is all about. What is sad is that so few learning and performance support professionals currently provide clients with credible worth or ROI information. On the bright side, as you are about to discover, it isn't all that difficult to do. It does require persistence, patience, and knowing *what* to do, as well as *how* to do it. As you cross the threshold to Part II, gather up your persistence and patience. In the ensuing pages, this toolkit offers you the "what" and "how." Enter . . .