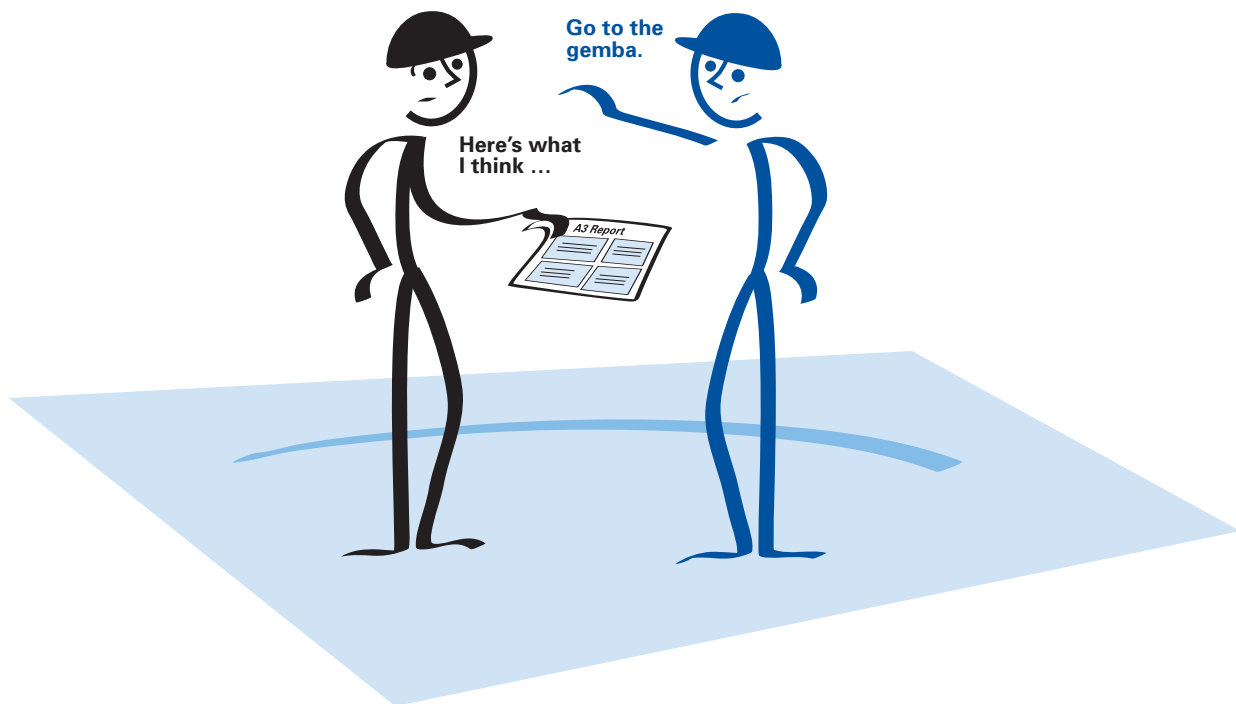


Chapter 2

Grasp the Situation—Go to the Gemba

Acme Manufacturing is the U.S. subsidiary of a midsized Japanese manufacturing company. Five years ago the parent company launched its initial U.S. investment with the launch of its largest overseas factory. A current expansion plan for that plant is projected to double capacity and extend product lines. The expansion also will nearly double the size of the production organization.

At the U.S. Acme site, manager Ken Sanderson has assigned middle manager Desi Porter the project of improving the document-translation process for the expansion. This translation process was fraught with problems during the plant's startup, and, now with Sanderson's mentoring, Porter has been charged with bringing such problems to light and proposing ways to improve the process. This seems simple enough, but for many companies, with the exception of those like Toyota, looking for problems is counter to corporate culture.



1
2
3
4
5
6

*"For Americans and anyone, it can be a shock to the system to be actually expected to make problems visible," said Ms. Newton, a 38-year-old Indiana native who joined Toyota 15 years ago and works at North American headquarters in Erlanger, Ky. "Other corporate environments tend to hide problems from bosses."*¹

1. Martin Fackler, "'The Toyota Way' is translated for a new generation of foreign managers," *The New York Times*, February 15, 2007.

Desi Porter: What Is the Problem?

Desi Porter, a recently appointed middle manager of Acme Manufacturing, had a problem.

He stared at the blank piece of paper in front of him. He thought he knew what to do about the assignment he had just been given. But what was he really supposed to do with this piece of paper?

The assignment had been handed to him by his boss, Ken Sanderson: “Desi, the plant expansion will require a significant amount of documentation from our mother plant in Japan. Those documents will all need to be translated on-time, within budget, and with perfect quality in order to support a successful launch. I need you to look at our current translation process, evaluate it, and make a recommendation. You know the overall expansion timeline. This is very important for the company. Please prepare a preliminary A3 and bring it to me for discussion.”

Porter was new to his role as junior manager of administration, but he had worked long enough within Acme’s lean system to understand that a commonly accepted way of tackling problems and making proposals did exist—the A3. He had seen many A3s in his previous assignments and had, in fact, created a few simple problem-solving A3s. The format in those cases was pretty straightforward.

Porter remembered hearing one training specialist refer to A3s as “storyboards,” indicating that there was a story told through a highly standardized format of panels or boxes with subject headings. Sometimes these were drawn on an 11-by-17-inch sheet of paper like he was staring at now. At other times they were large presentation panels.

Ken Sanderson: The Means to Manage

Ken Sanderson, Desi Porter’s manager, had many problems.

The document translation process was just one of them. Among other things, he was responsible for reducing overall costs by 10%; improving safety in the wake of a major accident; hitting startup quality and volume numbers for the expansion; as well as addressing the many concerns that invariably arise regularly from below (the shopfloor) and above (senior leadership). On any day, people and problems were coming at him from all directions.

Sanderson had been supervising a staff of 10 direct-reports in charge of various shared services, such as purchasing and training, when he received the assignment to lead the new expansion project. The project would consume two years and \$250 million, and he was gradually feeling overwhelmed. Now, with only a little more than a year to go before launch, his numerous responsibilities were growing, often without commensurate funding, he fretted, to support them.

Tight cost expectations, stringent requirements for quality, and an extremely tight timeline for the product launch were front and center. But Sanderson knew that Acme was not a

Porter knew his new assignment meant he had been given ownership of a problem, and he needed to develop a proposal. This particular problem was tied to the addition of manufacturing capacity, which would entail the construction of a new building, installation of new equipment, and hiring and training of new employees. While the expansion was great news (it confirmed that the company was doing well), the development also would create new challenges. The many difficulties of the original plant startup were still fresh in everyone's mind. One of these problems was an almost invisible but troublesome issue: translating a mountain of documents from Japanese to English.

As Porter researched the translation process, he realized that translating the documents was a huge project with complex technical requirements. It was far more complex and difficult than he had realized. The documents to be translated covered everything from the sourcing of specific parts to equipment specifications to shipping and packaging requirements. They contained highly technical terms and local idiomatic phrases, not to mention symbols and charts that were often complex and needed to be physically incorporated into the documents. Translating them quickly and accurately was essential for the plant to operate effectively at startup.

This was a complex project that touched many different operations and functions, even cultural differences. With so many requirements on so many levels, Porter wondered how he could propose the *right* solution.

He had read through an array of A3s that had been used in the plant for a variety of problems: reducing injuries from handling sheet metal,

company to let budget estimates, which after all are just estimates, become the tail that wags the dog. Acme was extremely cost-conscious, but at the same time didn't fall into the trap of trying to manage by the numbers. He needed to do everything possible to control and even lower cost.

Document translation had been a back-burner issue that no one had turned serious attention to until recently. Sanderson knew that the translation process, like many others, needed to support the launch effectively by providing required levels of quality in the required time. If he could get the process to be dependable, the rest would take care of itself.

Most of Sanderson's staff had enough background in basic lean principles and tools to understand how they worked. Yet, like Porter, they often lacked enough direct experience in daily operations to see how the tools fit into a broader lean management system. And every lean skill developed from a learn-through-doing process, requiring direct, hands-on experience.

The expansion project could give many of his staff that experience. Sanderson needed to develop *the thinking* of Porter and the others. In doing so, he would develop many sets of skilled eyes and hands to support his role as a manager and leader.

- 1
- 2
- 3
- 4
- 5
- 6

producing more orderly workstations, fixing technical problems in engineering, improving invoicing and accounts receivables, and improving the customer call center in the front office. Surely this approach could help with the problem at hand.

And so, with a little knowledge, Porter earnestly began his A3 to address the document translation problem.

And so, with a mixture of trepidation and confidence, Sanderson had determined to assign this important project to Porter and mentor him to success.

Standardized Storytelling

An A3 should tell a story that anyone can understand, following it from the upper left-hand side to the lower-right side of the paper. The reports don't merely state a goal or define a problem in a static or isolated manner. Like any narrative tale, an A3 shares a complete story. There is a beginning, a middle, and an end, in which the specific elements are linked, sequential, and causal. That's why a complete A3 traces a journey from the context and definition to its "resolution," which usually prompts a sequel.

One way to describe the A3 is as "standardized storytelling," which refers to the ability of A3s to communicate both facts and meaning in a commonly understood format. Because readers are familiar with the format (a story), they can focus easily on the matter contained within as the basis for dialogue. A story is more than lifeless data to prove a point. It brings the facts and the total reality of the condition to life so the reader can understand and debate the true nature of the situation.

Not So Fast

Porter wanted to show Sanderson that he could quickly produce a quality A3 that solved the problem of translating technical documents. He wanted to complete an A3 that would get approved right away and get his solution into action.

Porter considered the basic questions and drew a template on the paper. He knew the typical A3 setup and had heard A3 proposals referred to as “standardized storytelling” (*see sidebar on p. 16*). So he tried thinking of his story, starting with the *Title* or theme. The *Title* should describe the specific problem being addressed and answer the basic question: *What does the A3 owner want to talk about, to propose?*

One of Porter’s colleagues had shared this piece of A3 advice: “The *Title* is more than just a descriptive label. That’s because articulating the right theme will force you to describe the real problem. Seeing the right problem and defining it accurately is the key to the entire process. You may not start with the right theme, but you will begin the conversation that gets you there.”

What was the real problem that Porter needed to address? Across the top of the page he wrote, *Create robust process for translating documents.*

Porter considered the next section, the *Background* to this problem. He knew that in this first blank box he should provide the underlying conditions for the report, describing the need for the problem to be solved. *Why am I posing this problem? What is the broader business context of the issue?*

Producing People before Products

Sanderson knew that his own proficiency at putting out fires wouldn’t grow his employees, produce valuable learning, or make his life any easier. Indeed, the better he got at quickly patching up a problem, the more long-term goals would elude Acme.

Sanderson needed to develop proficient problem-solvers. This meant individuals who were comfortable with a scientific approach to work, who took ownership and responsibility for their work, and who would one day have enough mastery to teach these principles to their subordinates. And he needed to make this happen without forcing it to happen. That meant there would be some mistakes along the way, but mistakes that would lead to learning.

Sanderson needed Porter and others to *learn how to learn*. The A3 would help this happen. For Sanderson, A3 represented a management process to develop learning among employees in addition to being the tool that would help Porter propose countermeasures to his specific document-translation problem.

Improving the document-translation process had not originally been high on Sanderson’s radar screen. Other things, such as safety or quality, always seemed more urgent.

- 1
- 2
- 3
- 4
- 5
- 6

He knew that problems with translated Japanese documents had created numerous headaches for the plant in the past. They often arrived late and contained errors due to the complexity of translating both language and technical details. The activity was always over budget. And the problems caused by the delays and the missing information cascaded into major delays at the start of production—an unacceptable condition to allow to continue at a company like Acme.

He considered whether he could fix it by simply improving the way things were handled at the moment. Couldn't people just do their jobs better?

Porter knew that cost pressures were increasing on the company in general and that the launch plan included requirements for cost reductions in all activities. A deep dive into the cost structure of the document-translation process seemed like a good place to start, so Porter spoke with Frances, the procurement specialist in charge of purchasing indirect services such as translation.

Frances told Porter that she had been concerned about the substantial difference in the pricing of the three main translation vendors for some time. Porter prodded her for more information. As they explored this topic further, Frances looked through her files, and together they realized that the vendors had never been through a full competitive bid process. Porter was excited by this discovery, which led him to what he considered the obvious answer: implement a competitive bid process to select the best and lowest-cost vendor.

Porter immediately returned to his A3. In the box marked *Background*, he wrote, “New domestic plant expansion has massive technical

Document translation, which was always occurring to some degree throughout Acme, was one of myriad hidden activities that only received attention when there were problems. But now Sanderson recalled just how problem-rich document translation had been during the original plant launch. At that time the process ran at least 10% over budget, was habitually late, and caused delays and quality problems in production.

The combined importance and messiness of the translation process prompted Sanderson to cautiously consider Porter's responsibilities for the expansion. He felt confident that with coaching Porter would be able to get the job done and prevent a repeat of problems in the translation process. Furthermore, Sanderson reasoned that tackling this messy problem could be a great developmental opportunity for Porter.

Porter had been successful in most of his assignments so far. But he had no experience with such a cross-functional administrative process, and had shown a hesitancy to take action when he was in unfamiliar territory. His performance appraisal history showed that he seemed to like certainty and was uncomfortable in new situations.

requirements that must be translated from Japanese documents. The size and complexity of the project are creating errors and delays.”

He then worked quickly through the other sections of his A3 template:

- *Current Conditions:* Cost overruns. Delays. Errors. Complexity.
- *Goals/Targets:* Reduce cost by 10%. Reduce problems to manageable rate and simplify processes.
- *Analysis:* Challenge of translating from Japanese to English. Complexity and amount of documents. Problems stemming from multiple vendors.
- *Proposed Countermeasures:* Simplify and improve process performance by choosing one vendor based on competitive bid process.
- *Plan:* Evaluate current vendors. Identify new vendor candidates. Develop bid package, distribute, and choose winning bid.
- *Followup:* Monitor cost to proposal. Review performance at end of one-year contract. Put contract up for bid again if performance goals are not met.

Porter looked it over, pleased, and then took his A3 to Sanderson for approval. His boss was out on the shopfloor, so Porter left the report on his desk.

Sanderson believed that Porter would be able to work his way through the mechanical aspects of the translation problems. His natural people skills also would help him engage a very diverse mix of individuals and groups. However, he would need to stretch himself to learn how to handle more organizational complexity and uncertainty than he had experienced before.

Sanderson knew that assigning this responsibility to Porter meant that he was also assigning responsibility to himself to coach Porter through it.

Whose Problem Is This?

Sanderson returned to find Porter leaving an A3 on his desk. He walked over, picked it up, took a glance at the paper, and looked over to Porter.

“That was quick,” Sanderson said.

“Thank you,” replied Porter, unsure of Sanderson’s intent.

“That wasn’t a compliment but an observation. So you’ve been able to confirm the problem and define a plan of action?” Sanderson asked, handing the A3 back to Porter. “This is your A3, right?”

Porter realized he hadn’t signed the report, but resisted the impulse to initial it and hand it right back to Sanderson. It had seemed trivial to him before, but he remembered that every report included the initials of the owner of the A3: *Clear indication of ownership is important so everyone involved can know precisely who is taking responsibility for the problem or proposal.*

Without a word, Porter took the A3 and returned to his desk. He pulled out a file of A3s prepared by other Acme managers. He noticed that each A3 included an initial and date. But more importantly, they seemed to share a common quality. Most were rough, erased, scribbled over as a result of people making many iterative changes. He was beginning to understand: *The A3 owner indicates the draft date because A3s continually evolve and improve in the course of their use. Readers need to know that they are looking at the current version, and can chart the progress of an A3.*

Porter looked up to see Sanderson standing in front of him.

Beginner’s Mind

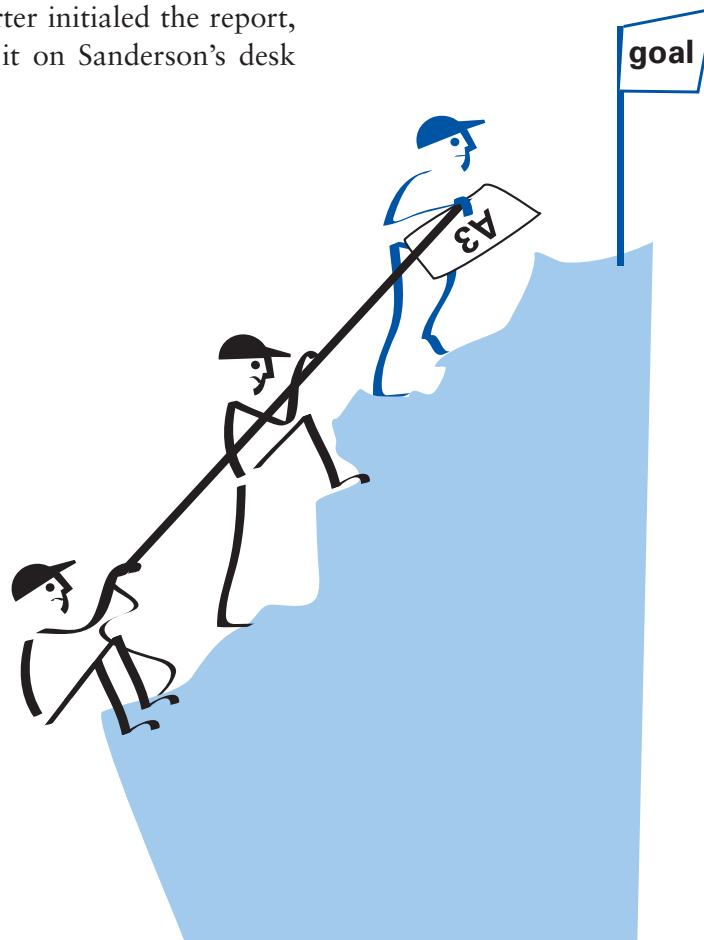
Sanderson appreciated Porter’s enthusiastic effort to solve the problem quickly and cost-effectively. Yet he knew that this first zealous rush to own a solution was certain to bar a full investigation of what was going on and prevent a thorough exploration of the best approach to the problem.

He needed to help Porter avoid simply being “right,” jumping to a solution, or attaching himself to one course of action. So he focused his work with Porter on coaching his attitude and expectations as much as his method.

Porter needed careful coaching at this stage in his learning process to maintain what some refer to as “a beginner’s mind,” an openness to many possibilities. Porter needed to look at the document-translation process with an open mind in order to see many possibilities rather than focusing only on a limited set of choices.

“Please take your time,” Sanderson encouraged him. “I’m not asking you to neatly fill in all the blanks. The point is to think about the content. Reflect on what the problem really is. Why is it important? How does it tie into what we are trying to accomplish? Don’t even worry about the plan of action yet. How could you complete a plan of action when you haven’t even confirmed whether there is a problem and, if so, what the problem is?”

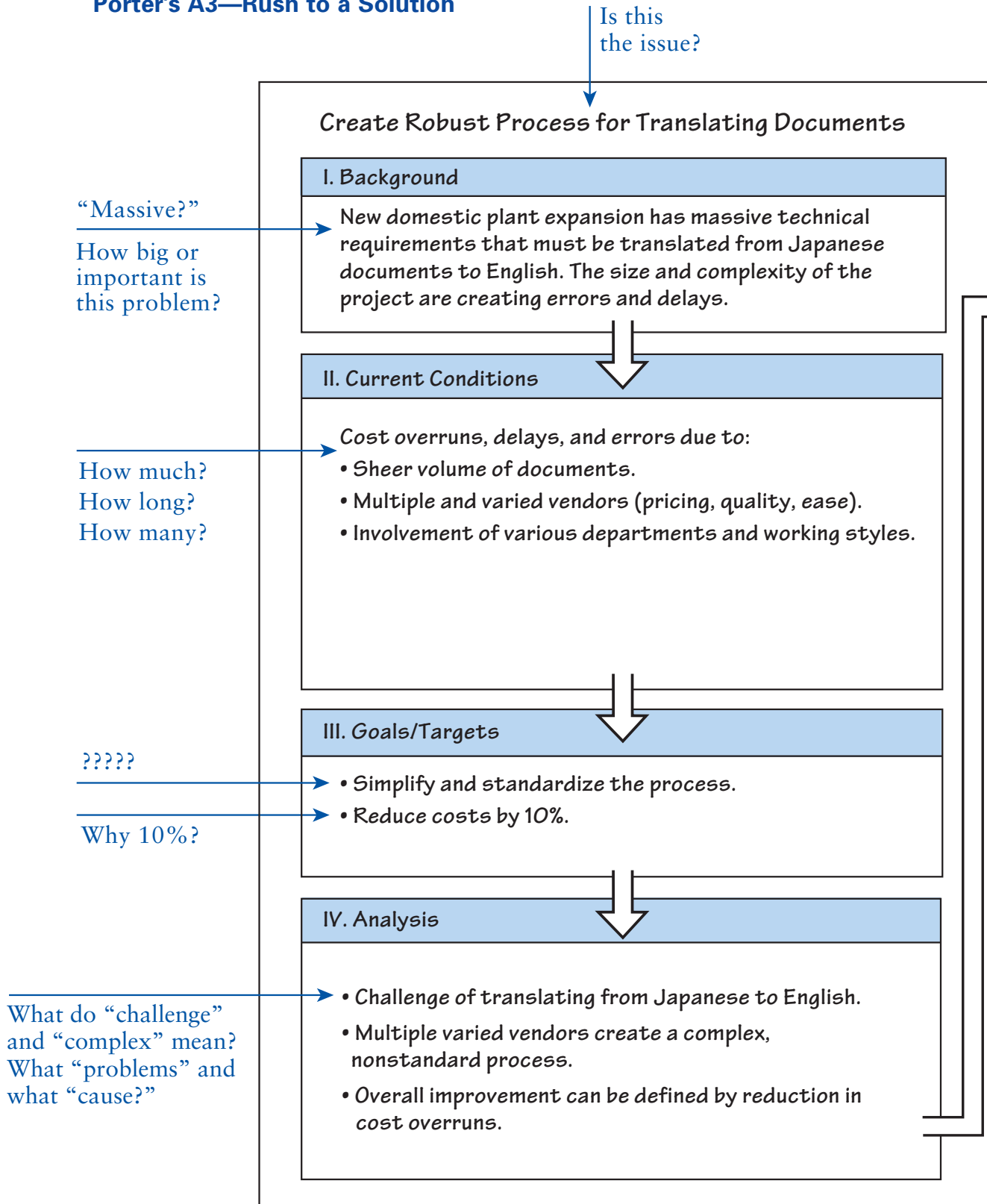
Sanderson left. Believing his initial ideas were essentially *right*, Porter initialed the report, added the date, and left it on Sanderson’s desk (see pages 22–23).



The leader’s job is to develop people.

- 1
- 2
- 3
- 4
- 5
- 6

Porter's A3—Rush to a Solution



V. Proposed Countermeasures

Simplify and improve process performance by choosing one vendor based on competitive bid process.

What does the number of vendors have to do with the problems?

VI. Plan

Evaluate current vendor.
Identify new vendor candidates.
Develop bid package, distribute, and choose winning bid.

How can we know any of this will work when we do not even know the problem or root cause?

VII. Followup

Monitor cost to proposal.
Review performance at end of one-year contract.
Put contract up for bid again if performance goals are not met.

- 1
- 2
- 3
- 4
- 5
- 6

How Do You Really Know What the Problem Is?

Sanderson had studied the “revised” A3 from Porter. “OK, before we talk about the specifics of your proposal, let’s talk about the problem. What exactly is the problem you are trying to address?”

“The costs are too high, the process is too slow, and there are too many errors,” Porter replied warily, pointing to this information on the paper.

“And how do you know that?” asked Sanderson.

“From talking with Frances in Purchasing and others,” answered Porter.

“What else have you discovered?”

“The process is very complex. We have multiple vendors with varying cost and performance.”

“Why?”

“Japanese-to-English translation is very difficult. There is a large volume of work to complete in a short amount of time.”

Sanderson sat back and replied deliberately, “That’s all very general and vague. Do you know how the process actually works? Can you tell me what is causing the problems and delays? What is actually causing the cost overruns?”

“Well, the work gets backed up, and the translators have to work overtime,” said Porter.

“So, the delays cause backlogs, which cause overtime. Good. Now we’re getting somewhere. So then what causes the delays?”

“Well,” Porter said, thinking hard, “I think it’s just the sheer volume of work.”

“Perhaps,” Sanderson said. “Tell me, do you know how the process actually works?”

Questioning Mind

Very neat and tidy; and yet deeply flawed, thought Sanderson as he reviewed Porter’s proposal. He had seen this type of thinking many times before: a rush to judgment in order to quickly be right.

The biggest flaw with Porter’s initial A3, and the underlying thinking behind it, was that he had jumped to a conclusion about the problem, about what had caused it, and what to do about it. This type of thinking was prevalent among Acme’s young managers, and it troubled Sanderson. He had seen too much of it—good people wanting to get work done, jumping to conclusions, and applying poor fixes that are doomed to fail over the long-term.

Sanderson knew that simply showing Porter his error would not necessarily lead him to “get it.” He reflected on a key lesson he had discovered: Avoid telling your people exactly what to do. Whenever you tell them what to do you take the responsibility away from them. He understood the essence of leadership is getting individuals to take initiative to continually improve on their own. He could help Porter by getting him to explore the “why” of the situation while making it clear that Porter was the one to work the “how.”

That’s why his first action had been to get Porter to accept ownership of the problem. Getting him to write his

“Well, the documents originate from our Japanese production shops. They are sent to one of three translators, who perform their work and then send them to the appropriate person in the appropriate shop,” said Porter.

“And how do you know this?” Sanderson asked.

“I read through some documents from the initial plant startup,” Porter said. “And I based my plans on what I knew and what I had heard around the plant. And I talked with Frances in procurement.”

“I see,” Sanderson said. “How can you tell how well this is working? What performance criteria are you using?”

“I see you’ve looked at cost,” Sanderson continued. “What about quality? Does the vendor with the highest quality have the same lead time as the others?”

“I don’t know,” replied Porter, surprised that Sanderson seemed to understand the nuances of the overall process as well or better than he did.

“And are some of the vendors easier to work with?” Sanderson asked. “Does that affect the quality of the work? And is the quality of the text translation different than that of the charts and graphs? Are there particular cultural challenges, such as the use of idioms that crop up in particular documents and require special attention? Do all the forms go through the same steps? Do they require different types of translators?”

“I don’t know,” was all Porter could say repeatedly. He realized that he had filled in all the boxes of his A3 form, but his approach was essentially worthless. He was surprised to find that his boss knew so much about the situation.

initials on the A3 was just a first (and largely symbolic) step to encourage Porter to take initiative for the entire process. Sanderson was tempted to go further but stopped himself. He had a clear idea of what he wanted Porter to do, but directing him too much would prevent Porter from thinking for himself and learning the key lesson of *taking ownership*.

Prior to his second conversation with Porter, Sanderson recalibrated his approach. He spent time studying Porter’s A3. He walked around the plant, and talked with individuals in his plant and other company plants. He was mindful of finding a way to help Porter find his own answers. He needed to do some research, not to solve the problem himself, but enough to know how to help Porter dig deeper and become a better problem-solver.

Sanderson wanted to help Porter avoid what experienced lean thinkers consider one of the gravest errors: appearing to know something concrete about a situation without having precise, direct knowledge.

He could lead Porter best through influence rather than instruction. This meant getting into the messy details and coaching him through the learning cycles of the work at hand. He avoided the temptation to share preachy homilies about work. He had learned from his Acme experience that the

1
2
3
4
5
6

This attention to detail made it clear to Porter that he needed to go see the nature of the actual problem, rather than applying a quick fix without understanding what had created the problems in the first place.

Porter was beginning to see that the first job when solving the problem was discovering precisely what the problem really was. Writing out a description of what he had been told was insufficient. In order to address a problem, he would need to determine what had created the problem in the first place. Simply producing an A3 wasn't a sign that he had finished his job; in fact, he saw that his work had merely just begun. He needed to go to the gemba.

most effective leaders earned worker loyalty through a careful “operator-out” approach. Leaders earned their stripes by building effective ways of work from the ground-up. They helped individuals see their work, thereby creating opportunities to remove wasteful steps. Helping people create more value on their own represented one of the highest forms of respect. Those individuals who were able to generate this type of constant improvement were the most natural and effective leaders.



Gemba Is More than a Place

Gemba (also spelled “*genba*” with an *n*) is the Japanese term for “actual place,” and describes the place where value-creating work happens. While lean practitioners often use the term to describe the shopfloor in manufacturing, gemba describes any setting in which individuals are creating value for a customer. It can refer to office settings, service settings, a hospital ward, or the shopfloor—anywhere that work takes place.

Real improvement only can take place when there is a front-line focus based on direct observation of current conditions where work is done. Toyota calls this principle, *genchi genbutsu shugi*, meaning the “principle of the real place and real thing.” For example, standardized work for a worker on a factory floor cannot be created at a desk in the engineering office; it must be defined and revised at the gemba:

“Of course, data is important at any gemba. But I place the greatest importance on facts or the ‘truth.’ For example, when a problem occurs, if our identification of the root cause is even slightly incorrect, then our countermeasure also will be completely out of focus. That is why we use the Five Whys repeatedly and thoroughly. And that attitude is the basis of Toyota’s scientific method.”²

In essence, gemba reflects a philosophy of empiricism—go to the gemba to discover the truth.

2. Taiichi Ohno, *Toyota Production System* (Diamond Press, Tokyo, 1980, first published 1978); John Shook translation.

Going to the Gemba

After his meeting with Sanderson, Porter spent the morning poring over the various types of translated documents that were used in the plant. As he looked for patterns and sought ways to apply an overall fix, such as a standard form for all procedures, he was struck by the sheer variety of the forms. There was a tremendous volume of documents with a great deal of technical detail. And the process to handle it all was chaotic.

He was surprised to discover that there was no single person who knew how the entire process worked. Each department handled its own documents independently—and differently. Porter made an effort to find a key person in each area.

After considerable legwork, Porter pulled together a group of people throughout the plant who could help him see the entire process. He visited them individually, gathering facts and getting ideas. But he still needed to learn more about the actual document-translation process.

Porter paid a visit to Acme's Information Technology (IT) Department. In a heavily air-conditioned control room with no windows, Porter found two technicians, Rick and Terry, who maintained the IT system that handled the substantial data transfer that took place between Acme and its headquarters in Japan. Rick and Terry had been handling this responsibility for Acme since the beginning of operations in the United States, so they knew all the problems that had occurred over the years. Whenever a problem occurred with data transfer, whether corrupt files or printing problems, everyone in the plant knew to go to Rick and Terry.

Gemba Mind

Sanderson remembered a slogan he had heard from his first supervisor at Acme: *If the learner hasn't learned, the teacher hasn't taught.* He was trying to teach Porter and others how to learn a specific, dynamic way of thinking that makes employees learn by doing, by understanding the situation through grasping the reality of the gemba. Ideally this meant teaching on the shopfloor, in the office, or at the shipping dock rather than holding formal training meetings.

He needed to use the process of fixing problems as a way of teaching a new way of thinking. (Sanderson had learned that the Japanese mentors who taught him the learner/teacher slogan had previously learned it from their American mentors decades before.)³

Sanderson also needed to encourage individuals to articulate and then share their problems. He wanted them to explain how they intended to address them. The A3 format would help by providing a platform to elicit their thoughts about the problem and their approach. And it created a way to communicate back and forth to evolve and deepen understanding.

The methodical nature of the A3 mentoring required Sanderson to be patient in his dealings with Porter—to

3. *Training Within Industry Report*, (Washington, DC: War Manpower Commission, Bureau of Training, 1945).

During the plant startup they were quite involved in the document-translation issue. Not surprisingly, common technical problems that occurred in the data-transfer process showed up in the translated documents as well. One common problem was that technical documents would fail to print properly.

Whenever that happened, everyone screamed for Rick and Terry, who would figure out how to get them printed. Because of this they had many opportunities to view the various translated documents from the various departments. They knew the comings and goings of the documents, the volume, the problems, the users, and their difficulties. For Porter they became a gold mine of information.

For Rick and Terry, the document-translation process was just a side job, but a big headache for them when things went wrong. When all went well, they got no reward; when problems cropped up, they cleaned up the mess.

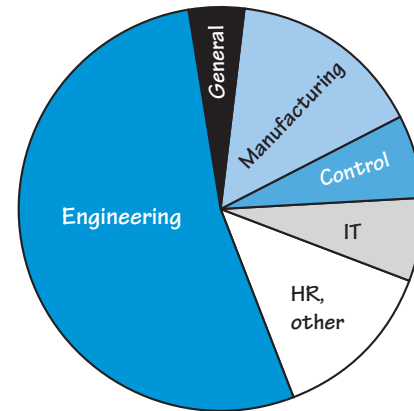
The duo naturally looked ahead with trepidation to the deluge of new document-translation needs. And they were wary when Porter showed up, but gradually warmed to him, happy to have someone to listen to their problems.

Porter listened to their woes and war stories, frequently pulling the conversation back to document translation. He thanked them for their input, and asked, “Is there anything else you think I need to know?”

“Well, most of the documents involved the Engineering Department,” Rick offered.

This confirmed what Porter had learned from Frances’ accounting records and worked into a pie chart. Engineering had the greatest volume of documents to be translated.

Documents by Department



- 1
- 2
- 3
- 4
- 5
- 6

“Yes, but most of the headaches come from manufacturing operations,” Terry added.

Porter described the idea he and Frances had developed, that of putting the process up for competitive bid and choosing the one best vendor.

“Sure. And we know the one to choose,” said Rick, with Terry agreeing.

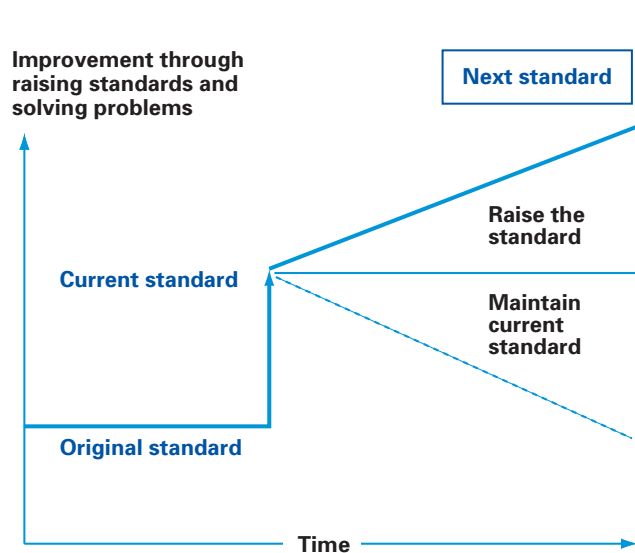
Porter took furious notes as Rick and Terry recommended the vendor that caused them the fewest headaches. After thanking them again for their help, Porter gathered up the forms and went to confer with Sanderson about what he had discovered, excited about his solution of a competitive bid to choose one vendor.

“I’m glad to see you’ve got a better handle on the overall process,” Sanderson replied. “What about the actual work?”

a point. Like supervisors everywhere, he also felt the pressure of broader organizational goals he needed to achieve. His own A3 addressing overall plant quality and shipping delays, of which translation-related defects were but one factor, reflected the urgency of being successful with this A3 management process.

Indeed, his timeline reflected these interconnected demands. Much effort had gone into putting it together and the result was a time-driven plan with the activities and objectives of numerous organizations intertwined, mutually dependent on the others to keep pace by performing and delivering their piece of the puzzle.

What Is a Problem?



A problem is any performance other than desired performance at any given time.

“The actual work?” Porter asked.

“Yes, the actual translation work. Do you know why the performance of the three vendors varies so much?”

“No. I could hazard some guesses. But does it really matter?”

Sanderson looked at him, “You want to understand the problem, right?”

“Got it—back to the gemba.”

Porter took his investigation to the translation vendors. He discovered that the translators were just as frustrated as anyone else. The challenges they faced were significant. Many of the Japanese documents they received were illegible. They often spent more time getting the originals into readable form than doing the actual translation.

The documents included many drawings and charts that were difficult to translate and recreate faithfully. And there were many idioms, colloquialisms, and abbreviations unique to the company and that varied from jobsite to jobsite, and even job to job.

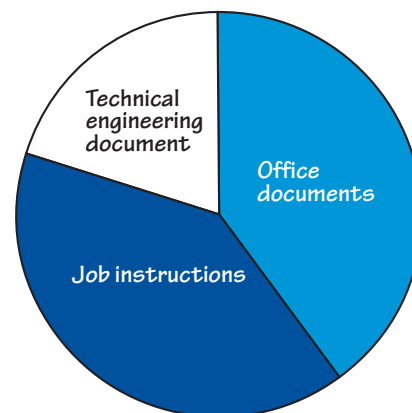
He found that there were three basic types of documents to be translated:

1. Office documents, such as policies, procedures, and general training materials, that could be translated by a general translator.
2. Technical engineering documents that required an engineering translator.
3. Job instructions: Descriptive documents detailing standard work; these were best done by translators who were close to the gemba.

Sanderson was the expansion launch project manager, but there were many functions and departments over which he had no direct control. He needed to get these groups to march forward together, working mostly separately but still in sync. In particular, product development and sales and marketing were completely out of his oversight or easy sphere of influence; they were dependent on him delivering the production and logistical capability to deliver the right product with the desired quality to the customer on time.

Sanderson had much work ahead.

Documents by Type



What's the Problem?

Or, first, what is a problem? Organizations spend enormous amounts of time and energy debating, exploring, and trying solutions—yet, how often is it clearly asked and answered, “*Just what problem are we are trying to solve?*”

Simply clarifying what we mean when we say “problem” can be powerful. A problem is something that presents itself as a barrier to the organization achieving its goals (a presenting problem or the issue that is presenting itself to you) and in some way relates to the way the work is designed or being done (a problem in the work). To solve the presenting problem or the problem in the work it is helpful to see the relationship between problem-solving and improvement and between improvement and standardized work.

The anatomy of problems and improvement:

Presenting problems and problems in the work: A presenting problem is the problem immediately facing you, an actual pain felt by the organization, or a gap between current and desired conditions, such as reduced profits, increased cost, diminished sales, a safety hazard, etc. A problem in the work is any deviation from the *standard way of doing things* or the regular routine or “kata.” A “kata” typically refers to fundamental martial-arts movements, but can refer to any basic form, routine, or pattern of behavior. Recognizable patterns of behavior and clear expectations make it easy to recognize abnormalities (problems) and also serve as a basis for improvement, setting and attaining higher standards.

Problems and improvement: Whether trying to maintain current levels of performance or aiming for new and higher levels, the identification of standards is requisite. As shown in the illustration on page 30, knowledge of the gap between current and desired levels of performance sets the stage for performance improvement.

Improvement and standardized work: The central role of standardized work in improvement is one of the most important and underutilized aspects of TPS outside of Toyota. A common misperception of standardization is that it is regimentation or command and control. Not so. The true value of standard work is to serve as the basis for experimentation. Standards are set—as bases of comparison—and are used as baselines for improvement. As long as current standards are as they are, there should be no deviation. However, if someone has a better idea for how to perform his or her own work, that idea is proposed, approved, tried, evaluated against the current standard, and rewarded. Far from regimenting individual work into robotic chores, standardized work can enable individual innovation at every level of the organization. As with traditional Japanese arts where the learner first masters the basic form of the “kata,” mastery of fundamentals of standardized work results in individual innovation being enabled and encouraged.

Understanding any problem is the first step to improvement and, theoretically, resolving it.⁴ Conceptual agreement on what a problem is in general makes it easy to clarify what the problem is in a specific situation. As Charles “Boss” Kettering was known to say, “A problem well stated is a problem half-solved.”⁵

4. See page 65 for a discussion of “Countermeasures vs. Solutions.”

5. Attributed to Charles F. Kettering (1876-1958).

Porter sighed. The more he learned about the problem, the more challenging it became. Prior to going to the gemba, he was armed with some data, hearsay, and ideas derived from his own experiences. Now that he had gone to the gemba, he was certain he could develop a better plan. Even though he wasn't sure how to fix this whole mess or fully understand why things were so messy, he did, for the first time, feel like he was beginning to see the mess.

Porter thought, *Maybe this is what progress feels like*. Once more he sat at his desk to address the problem. He had gone to the gemba and learned from what he saw. He produced a revised A3 titled, "Deliver perfect translations," which captured what he had learned from his investigation, no more, filling in only the *Background* and *Current Conditions* sections (see page 34).

1
2
3
4
5
6

Key Questions

- Who is responsible for this issue? Who owns the process for addressing the problem (or realizing the opportunity or managing the project)?
- What is the business context? How did you decide to tackle this problem?
- What do you actually know and how do you know it?
- Have you gathered and verified facts—not just data and anecdotes—to clearly understand the current state?
- Have you engaged other people?
- What is the problem? Can you clearly and succinctly define the “presenting problem”—the actual business issue that is being felt?
- Have you gone to the gemba?

Porter's First Revised A3

Is this the right title?

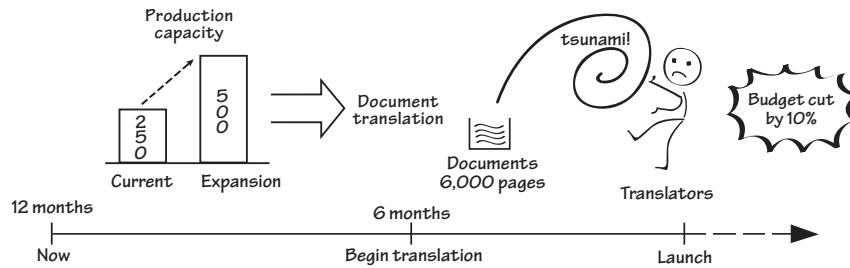
Deliver Perfect Translations

I. Background

Acme plant to double capacity!

→ Much document translation required!

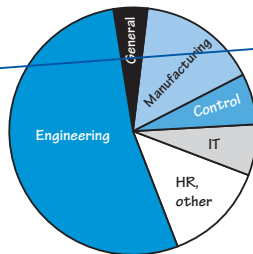
- Poor English translations of Japanese documents caused many problems at original plant startup.
- Expansion plans call for aggressive launch timeline and cost reduction.



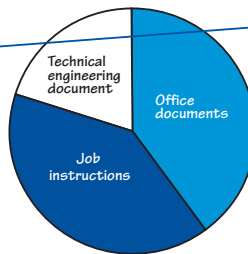
→ Document translation problems could impede plant launch!

II. Current Conditions

Documents by department



Documents by type



Problems in document translation at time of initial plant launch:

- Cost = High
- Delivery = Highly variable
- Quality = Many errors!

→ Problems in document translation process have not been corrected!

How high?
How variable?
How many errors?

			DP 6/3/08				

Don't get ahead of yourself.



- 1
- 2
- 3
- 4
- 5
- 6