

Chapter 2

Learning to See Provision

At the end of a consumption walk, managers invariably want to sit down and think about the many questions that have been raised. But there is really no point without also looking at the matching provision process consisting of the steps the business takes to deal with the consumer. We need to see why consumption is so challenging for the consumer even as the provider expends large amounts of energy, frequently without much economic reward.

So after catching our breath, we need to take a second walk, now through the provision gemba for the same product to see what a firm is actually doing to serve its customers. We need to record all the steps taken and the amount of human effort expended by employees. As we do this we need to remember that this also is a provision *experience* for the managers and employees operating the process. How they feel about the process will have a major bearing on how well they do their jobs and how well they satisfy the customer.

As we walk, we will also want to identify the points of interconnection between the consumption and provision streams, where the consumer and the provider directly

engage each other. These are often the points of greatest dissatisfaction for both consumers and employees.

Walking the Provider Gemba

In the case of Bob Scott's car repair, the process started when the Service Desk received the call from Bob, heard about the problem, described the nature of the repair, and provided an estimated price. Next, Bob called back to schedule an appointment.

Then Bob brought the car to the dealer on the agreed day and time, which was a pleasant surprise to the dealer, since many customers booking service appointments in North America do not actually show up with their vehicle at the agreed time. This permitted the dealer's Service Desk to take down all of the necessary information—remembering that this dealer had never seen this vehicle before and had no prior record to work from. The desk then wrote up the nature of the problem for the technicians in the Service Department.

Now it was time to get to work, except that the schedule of work for the day called for doing other vehicles first, the cars whose owners had brought their vehicles in earlier. So the next step was for the service assistant to drive the vehicle to the remote parking area and return with the keys.

When the repair sequence got to Bob's vehicle, the service assistant retrieved it from storage and drove it to the designated service bay.

In the service bay, a service technician finally looked at the vehicle to fully diagnose the problem and order the necessary parts from the Parts Department. Note that this is the first activity that actually creates any value from the standpoint of the customer. It occurred after the vehicle had already been at the dealer for more than three hours.

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The service technician recognized immediately that this was another of the dreaded “check engine” problems, and he also knew that simply changing out electronic parts, as recommended in the manufacturer’s latest service bulletin, might not solve it. However, replacing certain parts was the currently recommended first step, so the service technician estimated the cost of the job and went to the Service Desk. There he asked the staff to call Bob and get permission to make the repairs.

The Service Desk reached Bob—after several calls and a bit of a wait for him to return the last call—and listened to his complaints about the cost before reluctantly authorizing the repair.

From long experience the service technician knew that Bob would complain about the cost but that he lacked a realistic alternative and would approve the repair. Therefore, the technician took advantage of the wait time to go to the dealer’s Parts Department and wait at the window for the parts assistant to find the parts in the parts storage area.

After 10 minutes, the parts assistant reported that one of the needed parts was not in inventory and that it would be necessary to “call around town” to see if it could be located at another dealer. The manufacturer had a regional parts distribution center with this part in stock, but the center was 150 miles away and only delivered parts overnight. Therefore, in order to get the car back to the customer that day, the only alternative was to check the inventory of other service shops in reasonable driving distance.

After several calls to independent repair shops and a look at a computerized inventory of parts at local dealers for this brand of vehicle, the parts assistant delivered the bad news. The vehicle could not be repaired until the next day when the missing part arrived from the manufacturer’s regional distribution center.

The delay in obtaining parts necessitated taking the vehicle back to storage. It also triggered the next step, which was the hardest for the Service Desk: Call the customer and explain the delay. This was a frequent occurrence but was never easy because most customers challenged the need for the delay and were often harsh with employees at the Service Desk, even though the need for more time was obvious from their standpoint.

The next morning, with parts in hand, the repair could proceed. Once the vehicle was moved to the bay, the service technician was ready to make the repairs, the second activity thus far to actually create value from the standpoint of the customer. Given the modular nature of the vehicle and the lack of any need to adjust or tune these electronic items, the actual repair required only a few minutes.

From this point, only three more steps were required to get the vehicle returned and have the customer on his way: Take the car back to storage to await pickup. Do the paperwork at the time of pickup. Fetch the car from storage and wave goodbye to Bob.

However, as you remember from Chapter 1, the car—like 40 percent of those cars serviced every day in America—hadn't been repaired properly or on the same day. The “check engine” light came on again after only a few miles, and the repair cycle had to be restarted.

The key difference in the second repair cycle was that a special factory-operated, technical-assistance line was consulted, and a wider range of parts was replaced. Also, the vehicle was test driven to make sure that problem was completely solved. Fortunately, the vehicle ran properly and the repair cycle was completed.

This process was indeed cumbersome. In the last chapter, we listed the sequence of steps in the process. Now we have combined all of the steps and employee time required in the

two repair cycles and shown on the next page. Note that 29 distinct steps were required, consuming three hours and 40 minutes of employee time:

Drawing the Provision Map

Just as we visualized the consumption process in Chapter 1 by drawing a map, we can do the same by creating a provision map with the steps, proceeding from left to right (*Should the Repair Shop Be Repaired?*). However, note that we have grouped the steps into blocks of actions whenever they occur in a rapid sequence, such as the steps related to booking an appointment, making the actual repair, and delivering the vehicle to the customer.

We have done this in order to make the map easily readable. The critical challenge for any map is to include all the significant activities at a scale that can be understood in a glance. The following provision time waste map reveals how many—or few—of these activities deliver value.

For greater insight about the provision process, we can also shade those steps that actually create value as defined by the customer. And here we make an important finding: Almost none of the 29 actions performed actually created any value from the perspective of the customer. In fact, there were only two: the second diagnosis and the second repair, together requiring 35 minutes of employee effort.

For all the rest, although they were unavoidable in the current configuration of the process, the customer would have been equally happy with the result if the steps could somehow have been left out and certainly did not wish to pay for them.

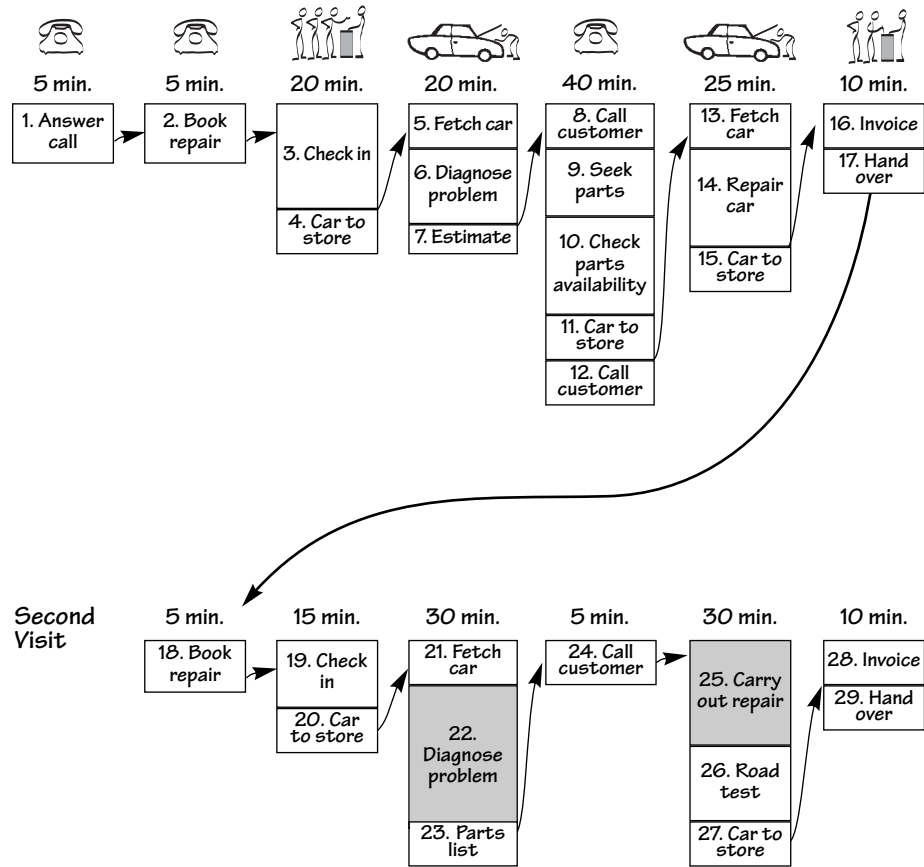
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Provision Step List

Steps	Provider time
1. Answer customer inquiry about repair	5 min.
2. Record appointment and schedule work	5 min.
3. Take down info and prepare work order	15 min.
4. Ferry vehicle to storage	5 min.
5. Ferry vehicle from storage to service bay	5 min.
6. Diagnose vehicle problem	10 min.
7. Draw up cost estimate and parts list	5 min.
8. Contact customer and obtain permission to repair	5 min.
9. Seek parts in parts department	10 min.
10. Determine when parts can be delivered	15 min.
11. Ferry car to storage	5 min.
12. Call customer to explain delay	5 min.
13. Ferry vehicle from storage	5 min.
14. Repair vehicle	15 min.
15. Ferry vehicle to storage	5 min.
16. Prepare invoice, run credit card, etc.	5 min.
17. Ferry car from storage and hand over to customer	5 min.
18. Record appointment and schedule work	5 min.
19. Greet customer and prepare work order	10 min.
20. Ferry vehicle to storage	5 min.
21. Ferry vehicle from storage to service bay	5 min.
22. Diagnose vehicle problem with factory help	20 min.
23. Draw up parts list	5 min.
24. Contact customer and obtain permission for repair	5 min.
25. Repair vehicle	15 min.
26. Road test	10 min.
27. Ferry vehicle to storage	5 min.
28. Prepare invoice, run credit card, etc.	5 min.
29. Ferry car from storage and hand over to customer	5 min.
Total provider time (29 steps)	220 min. (3 hr. 40 min.)

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Should the Repair Shop Be Repaired?



Box Score	
Provider's time:	220 min.
Value-creating time:	35 min.
Value/total time:	16%

Value = Waste =

What Do Workers Really Want?

We can also use the map to show the experience of the employees operating the process. We do this by assigning a satisfied face to steps which are fulfilling as work experiences and attaching a frowning face to those steps which are full of frustration and hassle. The provision experience map (*Why Isn't Work More Satisfying?*) illustrates how workers who experience the wasted steps respond.

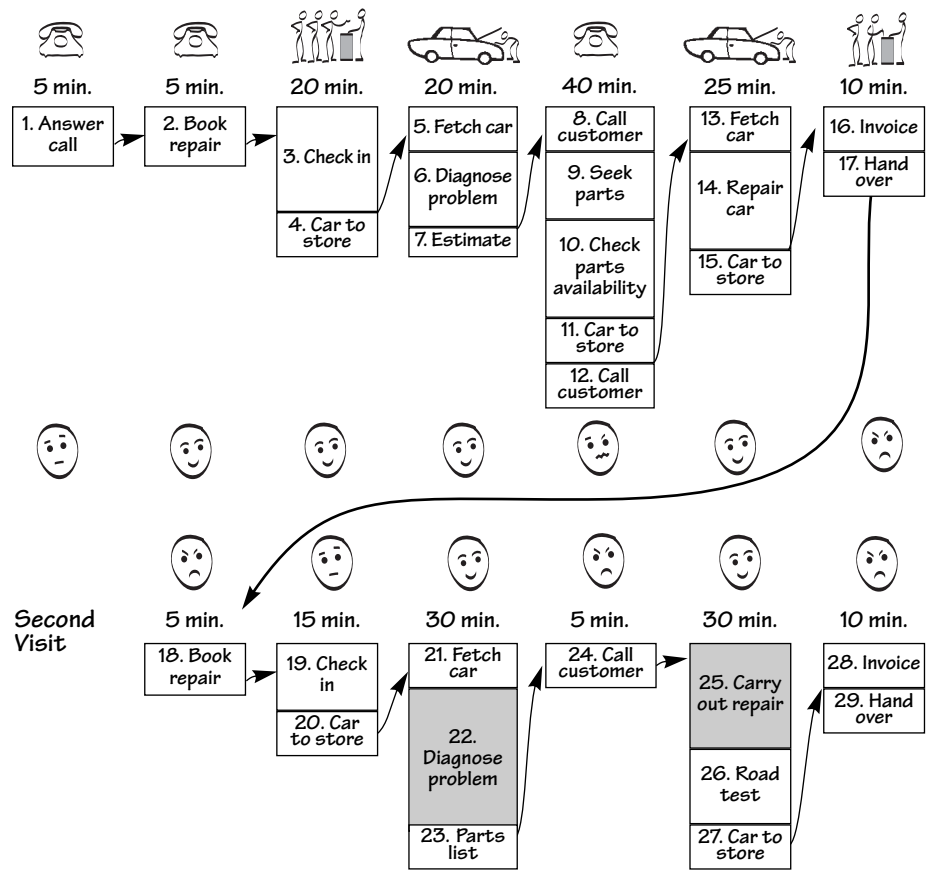
For example, diagnosing the problem and making the repair are satisfying to the Service Technician. Solving technical problems with complex equipment was the original attraction for the technician of getting into this line of work. Similarly, shuffling the vehicles from one point to another, while of no value at all to the consumer, was at least satisfying to the young staff members who sought work at the car dealer because of their love of cars. But explaining to the customer why the car was not ready and furiously filling out forms for impatient customers standing in a long line are stressful activities, as indicated by the frowning faces and by the high turnover levels in these types of jobs in all service businesses.

Connecting the Two Maps

We can complete our mapping process by arraying the consumption map from Chapter 1 in parallel with the provision map we have just drawn. This portrays a complete *value stream* consisting of the consumption stream plus the provision stream for the simple activity of getting a car repaired. The combined consumption and provision map (*Seeing the Entire Value Stream*) tracks the entire process for the first time from both perspectives.

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Why Isn't Work More Satisfying?

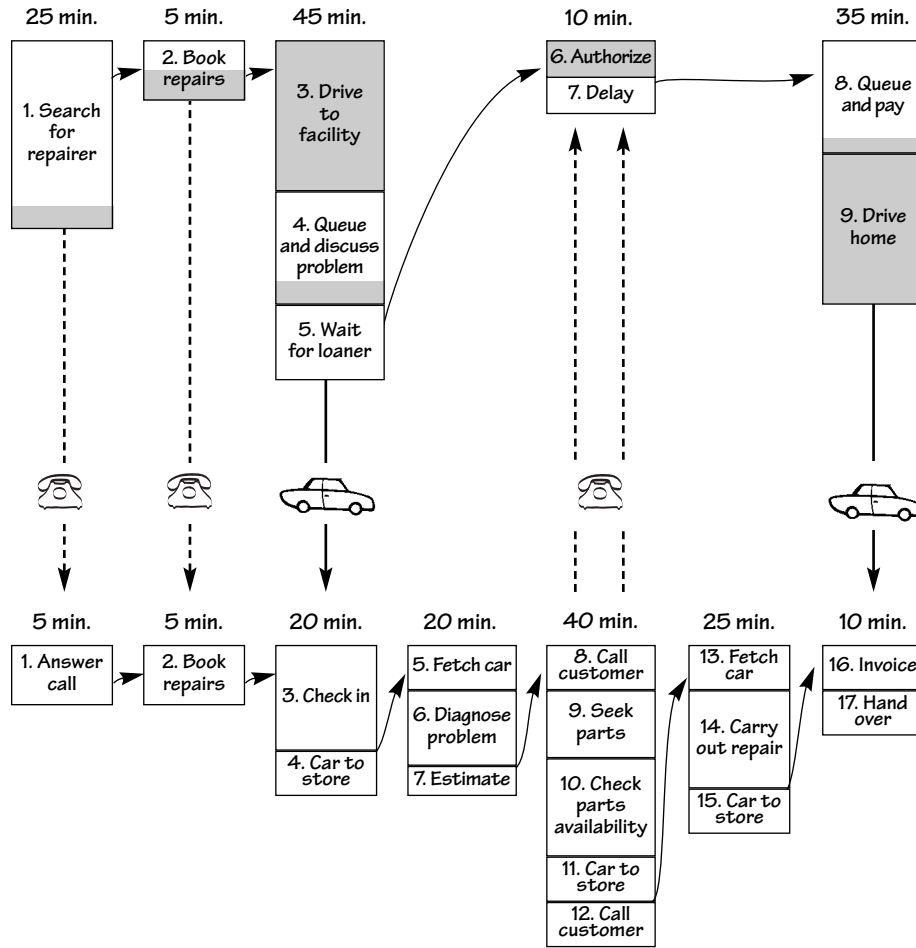


Box Score	
Provider's time:	220 min.
Value-creating time:	35 min.
Value/total time:	16%

Value = Waste =

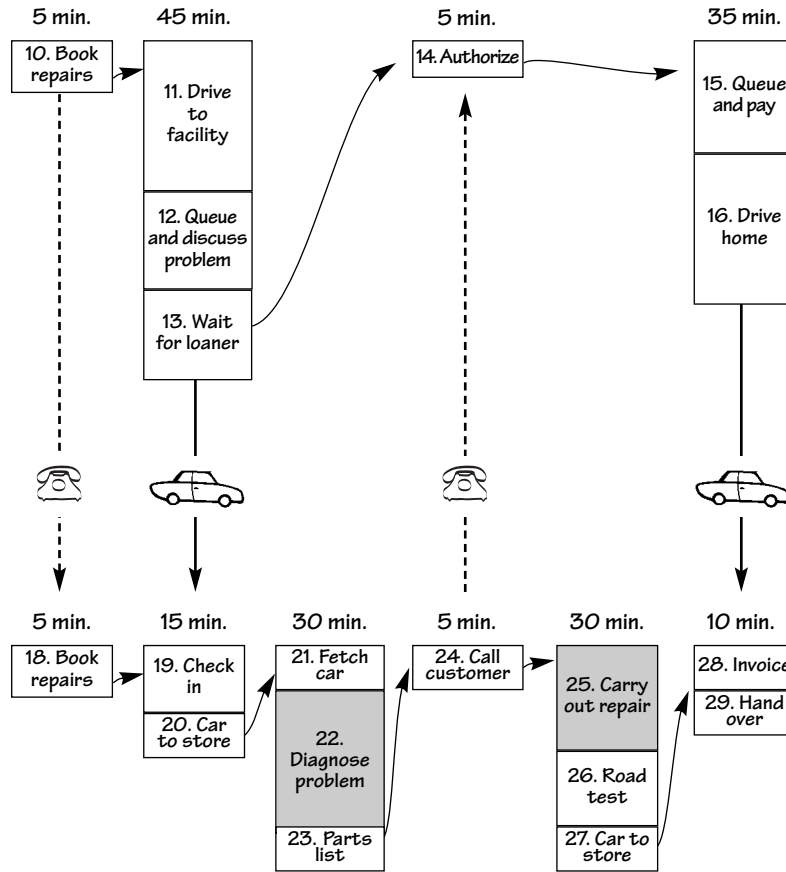
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Seeing the Entire Value Stream—First Visit



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Seeing the Entire Value Stream—Second Visit



Box Score	Consumer	Provider
Provider's time:	210 min.	220 min.
Value-creating time:	58 min.	35 min.
Value/total time:	28%	16%

Value =

Waste =

Nobody Wins in a World of Broken Processes

Learning to see the entire value stream can be a revelation. What's striking when we look at the completed step lists and value-stream map is how much of everyone's effort is wasted and how frustrating everyone finds the process. What's more, the points of maximum frustration are precisely where the consumer and provider deal directly with each other, as one stands in line or waits on the phone while the other tries to explain problems and justify delays. What might be the points of greatest satisfaction, as the customer and the provider work jointly to solve a problem, are often the times of greatest discomfort.

The net result is that the customer is actually paying too much for all those wasted activities, which cost the provider real money and which must be passed along. In addition, the customer is suffering stress from not knowing when the car will be fixed, how much it will cost in the end, and whether it will work. Meanwhile, the dealer's employees are also feeling stress as they wrestle with faulty processes that thwart their work and require them to explain unpleasant facts to the customer. And the dealer is not making the economic return he desires. In short, it's a lose-lose-lose situation.

Good People in a World of Bad Processes

How do we typically deal with this (far too typical) situation as humans? Mostly we default to "bad people" analysis. The customer concludes that the provider is either an idiot or a crook while the dealer decides that the customer is an overbearing incompetent, and the employees conclude that both the owner and the customers are a bad lot.

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And yet the problem is not bad people, although, of course, a few providers and consumers are idiots or crooks or both. The root cause of the problem is a bad process that no one can clearly see or manage. And the one thing we can conclude for certain, based on our years of observing faulty processes, is that if you drop good people into a bad process you quickly end up with a lot “bad” people assigning blame to each other. Even worse, there’s usually no trend toward a better process because assigning blame to the people rather than the process is just another form of waste.

Because our lives as consumers and as producers are critically dependent on a large collection of shared but poorly specified processes, surely we need to do better. And surely we can do better if we can learn to see and think together about improvements. The prize is very large if costly waste can be removed along with the unpaid work of consumers, the unfulfilling work of employees, and the high-cost activities of businesses. In the next chapter we will begin to see how this prize can be attained by applying the principles of lean consumption and lean provision.

