Toyota’s Four Rules

The tacit knowledge that underlies the Toyota Production System can be captured in four basic rules. These rules guide the design, operation, and improvement of every activity, connection, and pathway for every product and service. These rules are as follows:

**Rule # 1**

*All work shall be highly specified as to content, sequence, timing and outcome.*

At Toyota, when a car’s seat is installed, for instance, the bolts are always tightened in the same order, the time it takes to turn each bolt is specified, and so is the torque to which the bolt should be tightened. It is this type of specification that yields a predictable outcome.

**Rule # 2**

*Every customer-supplier connection must be direct, and there must be an unambiguous yes-or-no way to send requests and receive responses.*

Some companies devote substantial resources to coordinating people, but their connections generally aren’t so direct and unambiguous. In most plants, requests for materials or assistance often take a convoluted route from the line worker to the supplier via an intermediary. Any supervisor can answer any call for help because a specific person has not been assigned. The disadvantage of that approach, as Toyota recognizes, is that when something is everyone’s problem it becomes no one’s problem.

**Rule # 3**

*The pathway for every product and service must be simple and direct.*

It means that every piece of finished product has been through the same equipment and precisely the same process. It improves consistency, makes trouble-shooting easier and simplifies material handling and scheduling. It means that when a worker requires help there is a specific resource person to go to for assistance.

**Rule # 4**

*Any improvement must be made in accordance with the scientific method, under the guidance of a teacher, at the lowest possible level in the organization.*

For people to consistently make effective changes, they must know how to change and who is responsible for making the changes. Toyota explicitly teaches people how to improve, not expecting them to learn strictly from personal experience. It’s the frontline workers who make the improvements to their own jobs, and their supervisors provide direction and assistance as teachers.

All the rules require that activities, connections, and flow paths have built-in tests to signal problems automatically. It is the continual response to problems that makes this seemingly rigid system so flexible and adaptable to changing circumstances.

References

*SPEAR, Steven and BOWEN, H. Kent, "Decoding the DNA of the Toyota Production System”, Harvard Business Review, September-October, 1999.*

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*Decoding The DNA of The Toyota Production System*

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