Principle 8: Adopt and Adapt Technology That Supports Your People and Processes

The fundamental theory behind principle eight is that you must take a people and business first approach to incorporating new technology into the business. Just because a new technology is new and flashy, does not mean that it is a good fit and will benefit the company in the ways you might be hoping for or expect.

Toyota expects that if there is a process that involves thinking, the human will do the thinking while the computers will process the information. If a person believes that their process can be improved by automation, only then will Toyota move forward with exploring how it can be automated. Even once they have the new technology developed, they don't implement it right away. In one example, they developed new inventory tracking software and deployed it. The inventory tracking problems persisted, but now they had a better idea of how bad it was. In other locations where the tracking was done by hand, they were forced to improve the manual processes and resolve any errors. By developing a Kanban system, they were able to reduce their inventory problem by 80%.

In addition, Toyota believes that new technology is only a tool, and not necessarily a goal to be sought after. They believe that it is easier to "kaizen people processes very easily, but [that] it is hard to kaizen a machine." However, once you have optimized your existing processes, you begin to become aware of where it may be improved by new technology. If you can visualize the production, develop explicit knowledge of the process, and standardize it, you have taken key steps to identifying where the line can be automated.

One key thing to keep in mind is if the technology is decreasing the skill level required to perform a function, replacing a human at performing a function, or enhancing a process and reducing waste/defects. With all that said, departments must be able to prove that the new technology is viable and adds value to the company. Toyota also does slow, staged rollouts so that they are able to perfect the new process in one location before implementing it everywhere else. This allows them to work out the kinks in the process without affecting all of their production. They also know that just because a new process will work on paper, doesn't mean it will work it real life.

To sum up, Toyota avoids jumping on the latest technology trends because it can lead to poor decisions in investing in fixed capital costs. Toyota works hard to maintain the right balance of people and automation and only automates a process when it is both cheaper and better than having a person do the same task. Lastly, Toyota will only adopt and adapt technology that supports people and businesses.