

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

Hailey Skoglund & Gus Lipkin

# COMPUTERS PROCESS THE INFORMATION. PEOPLE DO THE THINKING.

- Technology cannot replace people
- Behind every piece of equipment, there was a person's creative idea to improve the process
- Example: *Parallel Study*
  - With New Technology:
    - Automated inventory tracking software
    - Keeping track of inventory on the computer does not fix the problem, it just provides visibility into the current process
  - Without New Technology:
    - Sustainable inventory control was achieved by people actively improving the process
    - A manual pull system, using Kanban, reduced their inventory problem by 80%

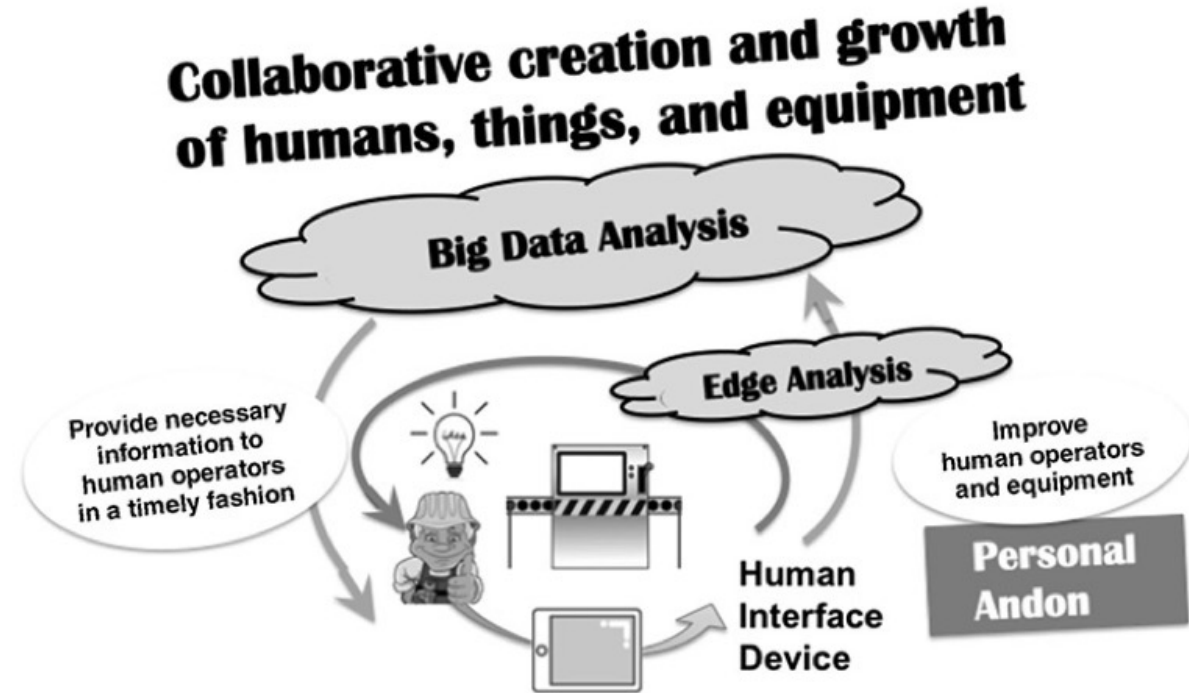
# TECHNOLOGY IS A TOOL, NOT A GOAL.

- Implementing the latest information technology is not a business goal at Toyota
- Facility automation is not always representative of its productivity levels
  - “Toyota’s most productive regional parts depot was in Cincinnati, where there was very little automation.”
- “You can kaizen people processes very easily, but it is hard to kaizen a machine.”

## AUTOMATION AND EQUIPMENT CAN ALSO BE IMPROVED BY CREATIVE, THINKING PEOPLE

- Visualize production.
- Develop explicit knowledge of the process.
- Standardize the knowledge.
- Develop intelligent automation through kaizen.

DOES THE TECHNOLOGY  
DESKILL, REPLACE, OR  
ENHANCE?



*Human utilizes machine info to accelerate kaizen*

**Figure 8.2** Denso depiction of the internet of things supporting people.

## BALANCING THE RUSH FOR THE LATEST TECHNOLOGY WITH EFFECTIVENESS

- Departments must be able to prove that new technology is viable and adds value
- Slow rollout in stages to work out the kinks rather than rapid rollout all at once
- Just because it works on paper, doesn't mean it'll work in practice

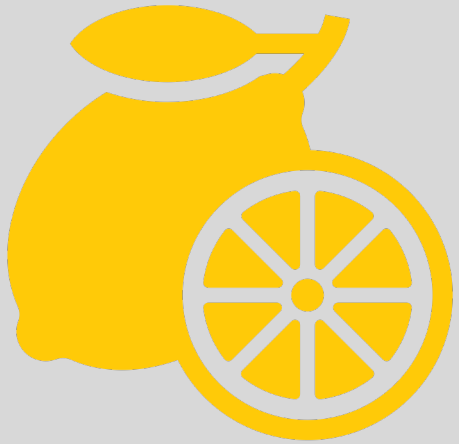
## KEY POINTS

- Focusing only on automated equipment can lead to too much money tied up in fixed capital costs.
- “Simple, slim, and flexible”
- Right balance of people and automation
- Continuous improvement of automated equipment can help organizations move closer to the lean vision of one-piece flow without interruption.
- Building upon Toyota Production System (TPS) principles can open doors to real-time, continuous information to accelerate and amplify kaizen.
- Toyota prioritizes people over automated equipment

## BUT WHAT DOES THIS HAVE TO DO WITH LEMONS?

If you just jump in and eat a lemon, it'll be sour and probably not great. If you take time to learn about the lemon, you'll discover its many wonderful properties and how it can really add to your dishes.





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