

# KEY LEARNINGS: INTRODUCTION – THE FIVE LEVELS OF MISTAKE-PROOFING IN SERVICE

#### Overview

- Service mistakes aren't random—they follow patterns and stem from weak points in processes.
- The core philosophy of Poka-Yoke is: Prevention is better than correction.
- This lecture bridges the six Poka-Yoke principles to five practical levels of mistake-proofing in service industries, focusing on reducing human error.

## 1. Elimination - Remove the Error-Prone Step Entirely

- Strongest level of mistake-proofing.
- If a step often leads to mistakes, design it out of the process.
- Example: Eliminate manual approvals by auto-processing low-risk tasks.
- Goal: Completely prevent the opportunity for error.

## 2. Replacement - Swap Fragile Steps with Reliable Systems

- Used when elimination isn't possible.
- Replaces human-dependent tasks with automation or simplified tools.
- Example: Replace manual data entry with barcode scanning.
- Goal: Reduce variability and reliance on memory or judgment.

### 3. Facilitation - Make the Right Action the Easiest One

- Encourages users to naturally choose the correct option.
- Uses design to guide behavior and minimize decision fatigue.
- Example: Pre-filled forms, intuitive booking systems, or one-click checkouts.
- Goal: Reduce cognitive effort, increase consistency.

### 4. Detection - Catch Errors Before They Cause Harm

- Doesn't prevent mistakes, but identifies them early so they can be corrected.
- Example: System alerts for missing data, or confirmation popups before submitting actions.
- Goal: Intervene before an error impacts the customer.



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### 5. Mitigation - Minimize the Consequences of Mistakes

- The final safety net.
- Reduces the damage after an error has occurred.
- Example: Auto-save and version history in digital tools; flexible refund policies in customer service.
- Goal: Prevent small mistakes from escalating into major failures.

#### Conclusion

- These five levels adapt Poka-Yoke for service industries, where errors often stem from:
  - Human decisions
  - o Distractions
  - Overload and complexity
- Together, they transform unpredictable processes into reliable systems.
- Next step: Deep dive into each level to understand how to apply them in real-world service settings.