MITSUBISHI ELECTRIC
Changes for the Better

Easily support on-site work improvement with AI!
"Behavioral-analysis AI"

Do you have problems making on-site work improvements?

Issue: It's time-consuming to identify problem tasks

➤ It takes only minutes to analyze the task!

- Automatically detect time-consuming tasks or tasks completed quickly from repetitive work videos!
- Visualize the differences in tasks performed by workers such as veterans and newcomers!
- Affordable set-up with a standard camera and PC!
  (High-performance 3D cameras or PCs with GPUs are not required.)

Issue: Experienced workers are retiring

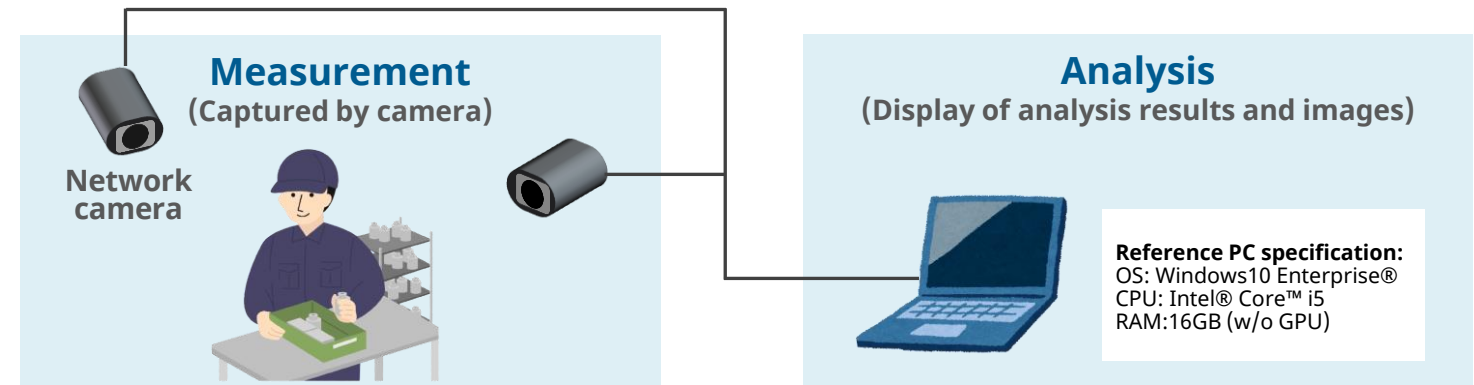#### ➤ Create educational materials! (model work videos)

- It is possible to automatically combine the skillful work of veterans to generate instructional task videos!
  (Workers do not need to add markers or indicators on their hands for position detection.)

Issue: Mistakes or forgotten tasks by operators

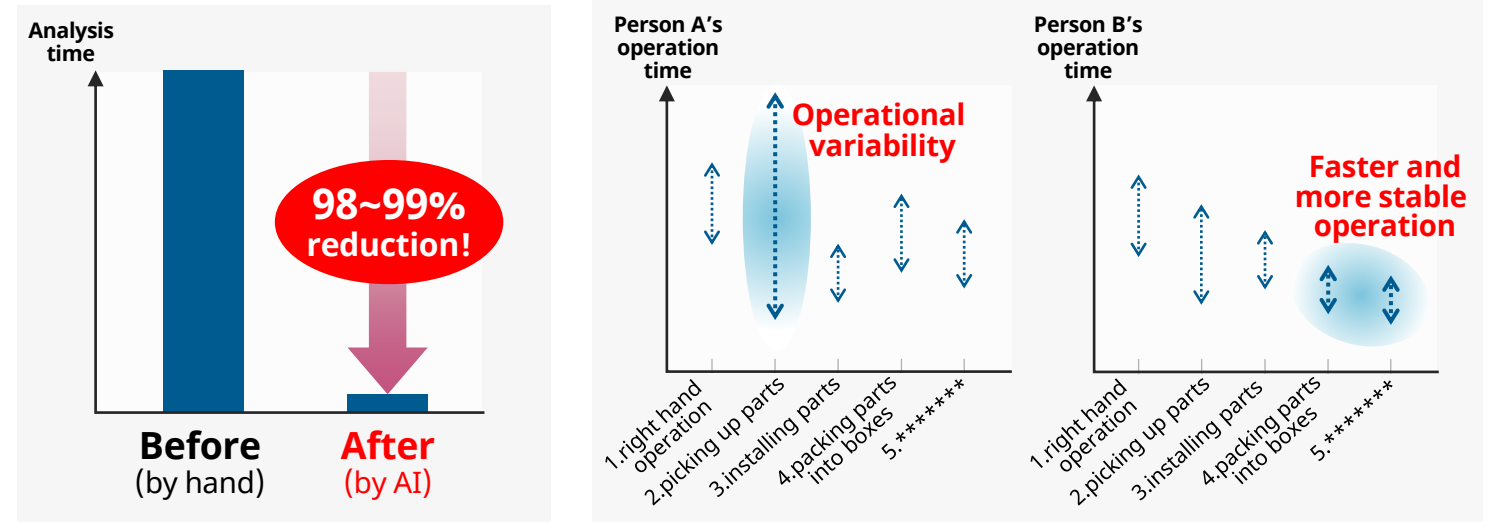#### ➤ AI notification of mistakes or if something is forgotten!

- AI automatically detects differences in work output and slow processes!

Example system configuration

Measurement (Captured by camera)

Network camera

Analysis (Display of analysis results and images)

Reference PC specification:
OS: Windows10 Enterprise®
CPU: Intel® Core™ i5
RAM:16GB (w/o GPU)

Advantages of implementation

● Shorten task analysis time[1]

Analysis time

98~99% reduction!

Before (by hand)   After (by AI)

● Visualize task variations by worker[1]

Person A's operation time

Operational variability

1.right hand operation
2.picking up parts
3.installing parts
4.packing parts into boxes
5.*******

Person B's operation time

Faster and more stable operation

1.right hand operation
2.picking up parts
3.installing parts
4.packing parts into boxes
5.*******

[1] Additionally, the system can be used to create educational materials (videos) and provide real-time notification of work errors.

Automating the World