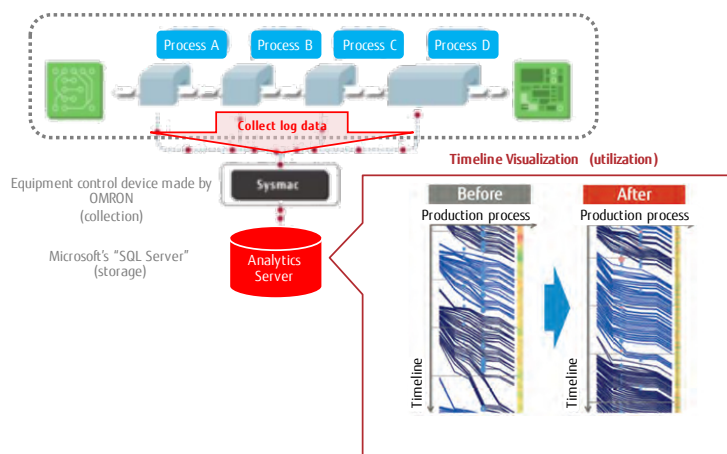OMRON

Omron Corporation

Improved production line productivity by visualizing the printed circuit board production process

Challenge

- The printed circuit board production line consists of a wide variety of equipment, making it difficult to centrally control each operation
- System operation is checked based on error logs
- To improve this, experts must analyze error logs for each piece of equipment, which takes many man-hours

Solution

- Printed circuit board production line

Process A   Process B   Process C   Process D

Collect log data

Equipment control device made by OMRON (collection)

Sysmac

Microsoft's "SQL Server" (storage)

Analytics Server

Timeline Visualization (utilization)

Before — Production process
After — Production process

Timeline

- Collaborative business with OMRON and Microsoft
- Visualization of production performance both individually and by process by linking each printed circuit board's product information to performance data per process on production lines

Benefit

- Non-experts can visualize the production status of each printed circuit board, increasing the efficiency of grasping improvement points six-fold
- Possible causes of processes suffering from decreased productivity can easily be identified, increasing hourly productivity by 30% within months

Products and services

- Adoption of OMRON's equipment control device and Microsoft's SQL Server to collect/store log data
- "Timeline Visualization" log data dashboard tool co-created through a demonstration experiment

shaping tomorrow with you

FUJITSU