Process Improvement at Rockwell Automation

**Problem Description**

Rockwell Automation is an Industrial Automation Company that produces Starters at their Cambridge facility.

**Starters**
- Apply reduced voltage to an AC motor
- Allow for its soft starting and stopping
- Limits the inrush current

**ETO** Engineered to Order
- 7 types of starters with various variations

**Job Shop**
- 6 processes to build a starter
- Unique set up and sequencing of process steps

**Stochastic Demand**
- Monthly production of starters and their types varies significantly

**Need Statement**

Improve product flow of Starters at Rockwell Automation

**Project Objective**

Increase the efficiency of production of Starters

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**Solution**

**Floor Layout**

- Work Centers rearranged to be closer to each other and provide an open concept layout.

**Product Flow**

- Production simulated to increase efficiency and decrease process times, resulting in an improvement of space and inventory.

**Goals**

- Reduce Distance Travelled by Starter
- Improve Line of Sight
- Increase Throughput
- Decrease Space
- Reduce Inventory

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**Results**

- Distance Travelled ↓ 47.5%
- Space ↑ 6.2%
- Line of Sight ↑ 17.6%
- Inventory ↓ 12.5%
- Through put ↑ 7.7%

**Conclusions**

The proposed solution redesigns the current facility to bring work centers closer together. The final assembly work center has been converted into a hybrid system, of job shops and assembly lines, improving product flow.

The changes suggested require relatively low costs of implementation.

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