

# **IE 3100R Systems Design Project: Scrap Parts Return Process**

**Department of Industrial and Systems Engineering** 

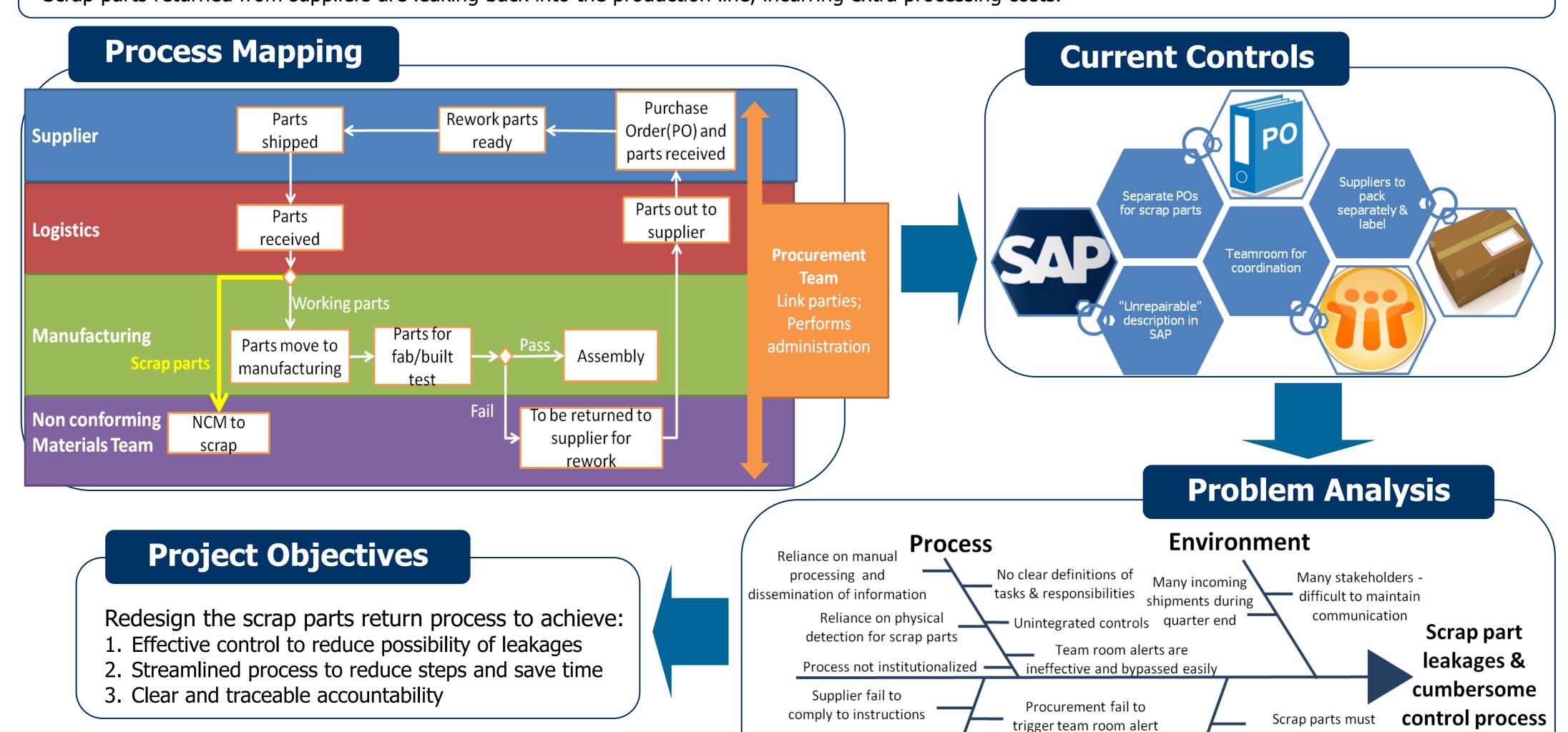


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### **Problem**

Scrap parts returned from suppliers are leaking back into the production line, incurring extra processing costs.



### **Proposed Solution**

**Design Principles** 

**Implementations** 

## **Effective Controls**

Shift from untargeted physical detection to information-triggered detection

Shift detection responsibility from **Logistics Crew to Logistics Admin** 

Achieve scrap parts detection via alert information in SAP

### **Streamlined Process**

People

Logistics Crew misses

out on physical labels-

Integrate new measures into existing job routines and reduce unnecessary steps

Integrate detection into routine Goods Receipt process

Replace normal parts receiving process (6 steps) with Dock Receipt process (1 step)

Remove current controls: "Unrepairable" description in SAP and Teamroom coordination

### **Accountability**

be scrapped at IBM

facility

Many suppliers from

different countries

**Policies** 

Decouple dependent tasks and assign clear roles

Procurement: liaise with suppliers; create separate PO in SAP with proper receiving location type

Logistics Admin: detect scrap parts via SAP; instruct GEODIS crew to remove scrap parts; administer Dock Receipt process

Logistics Crew: Physically locate & remove scrap parts; execute Dock Receipt process

### **Deliverables**

1. Standard Operating Procedures (SOP) for scrap parts return process, with clear definition of the process,

volved

Training Manual Scrap Parts Return Process people and roles. 2. Training materials for parties in-

Processes

SAP

**ZBAT** 

**ZTOL** 

**ZDCT** 

**ZDTR** 

**Impacts** 

# 1. Number of steps

**Original Process New Process Create PO Create PO Create team room Update SAP** alert **Arriving and Create team room** processing of goods alert Alerts during lead **ZBOP** Internal alerting **ZDTR** within Logistics **Arriving and** Steps: 5 processing of goods Time: 16 min **Check team room** by Logistics **Results** Finding of label 1. **58.9%** of **ZBOP** time reduction 2. **62.5%** of LT12 **MB21** 

step reduction

3. Points of leakages reduced from **15** to **5** 

Steps: 15 Time: 39 min

2. Traceable accountability for leakages Failure to... **Responsible Party** 1 Create scrap part PO Procurement 2 Assign the correct receiving location on SAP Procurement **3** Detect & instruct crew to remove scrap parts **Logistics Admin** 4 Remove scrap parts despite already being notified **Logistics Crew 5** Comply to Dock Receipt process **Logistics Admin** \*Suppliers' compliance no longer critical with the new system 3. Decoupling of tasks and reduction of work

