

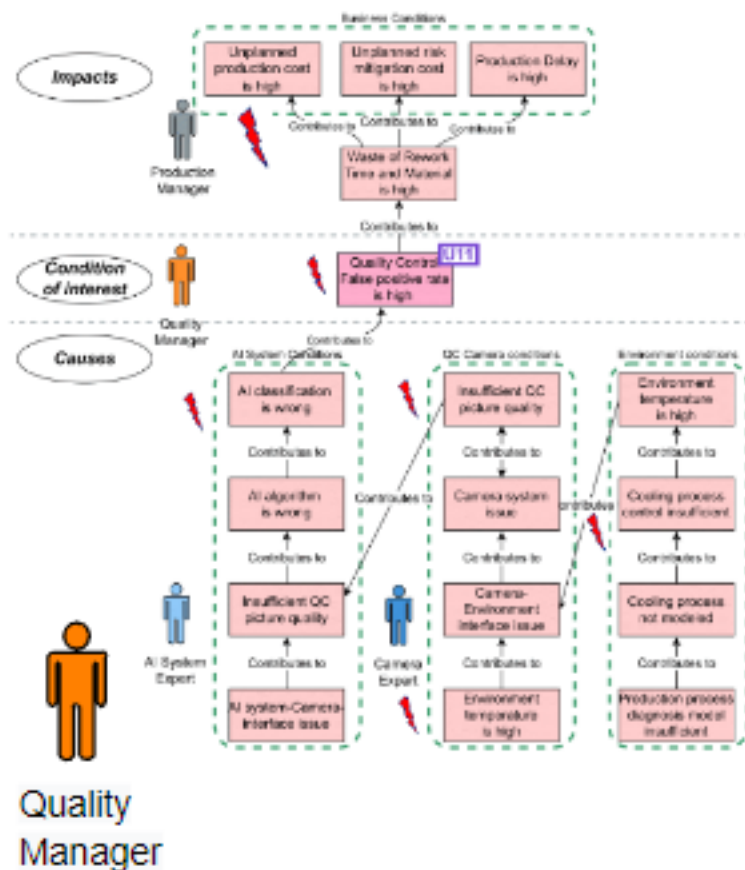
(1) Scope of work, value



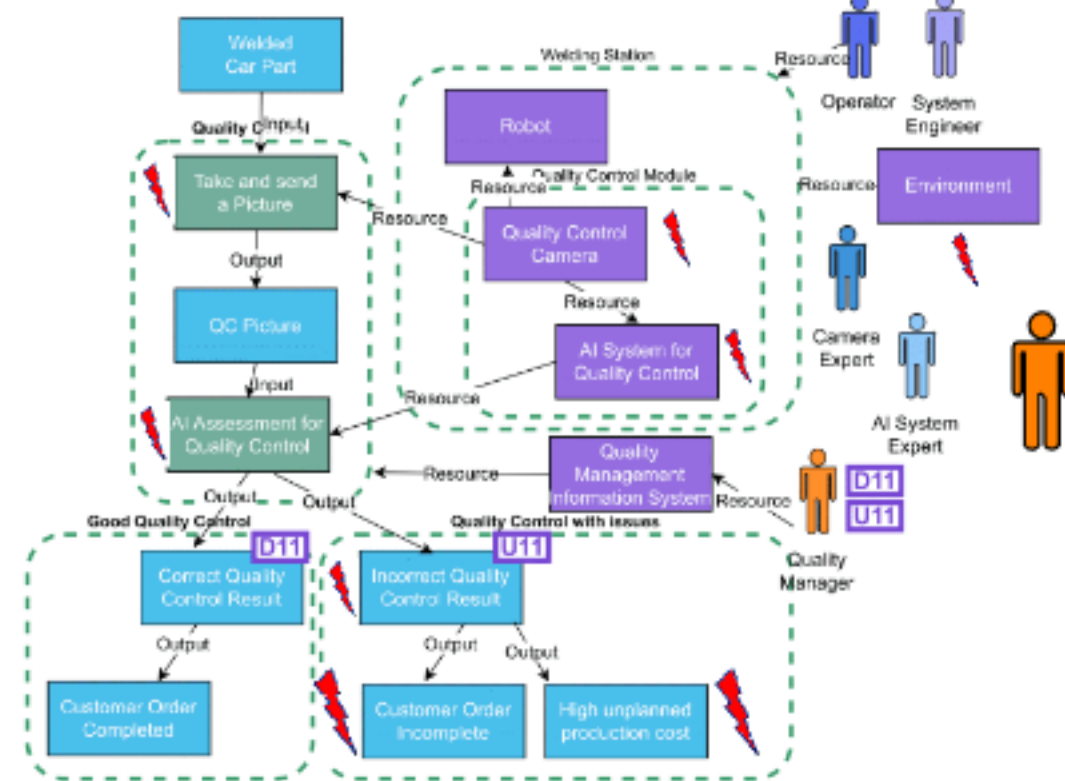
Process outcome:
Why is *Work Piece*
Transfer failure
rate high?

Work Piece
Transfer failed

(2) Condition Networks (DIN 60812)



(3) Asset Networks (VDI 3682)



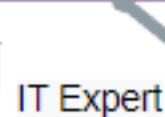
(4) Data Space (VDI 2206)



(5) Behavior-Driven Dev. Scenarios

Gherkin Scenarios

Scenario: Robot-Vacuum-Gripper loses a Work-Piece
Given Robot-Vacuum-Gripper lifted the Work-Piece
When the Robot-Vacuum-Gripper transfers the Work-Piece
Then the Robot-Vacuum-Gripper transfer lost the Work-Piece



Information System
Solution Architecture

Production Knowledge/Database

```
Scenario: OK10 -- Good
  # above limits (sh)
  # high ok state
  Then "number of OK"
  # above the threshold

MATCH gts=(n)
WHERE (ncause=true or neffect=true)
AND NOT (n)=[ippt_come]-()
FOREACH (s IN NEEDED(gts) )
  SET t.marker="Disposed.Red"

MATCH gts=(asppr)-()-(b)
WHERE (a)=[ippt_come]-()
AND NOT (a)=[ippt_come]-()
FOREACH (c IN NEEDED(gts) )
  SET t.marker="Disposed.Yellow"
```

IS Business Logics/Queries

Answers to stakeholder questions



IS User Interface