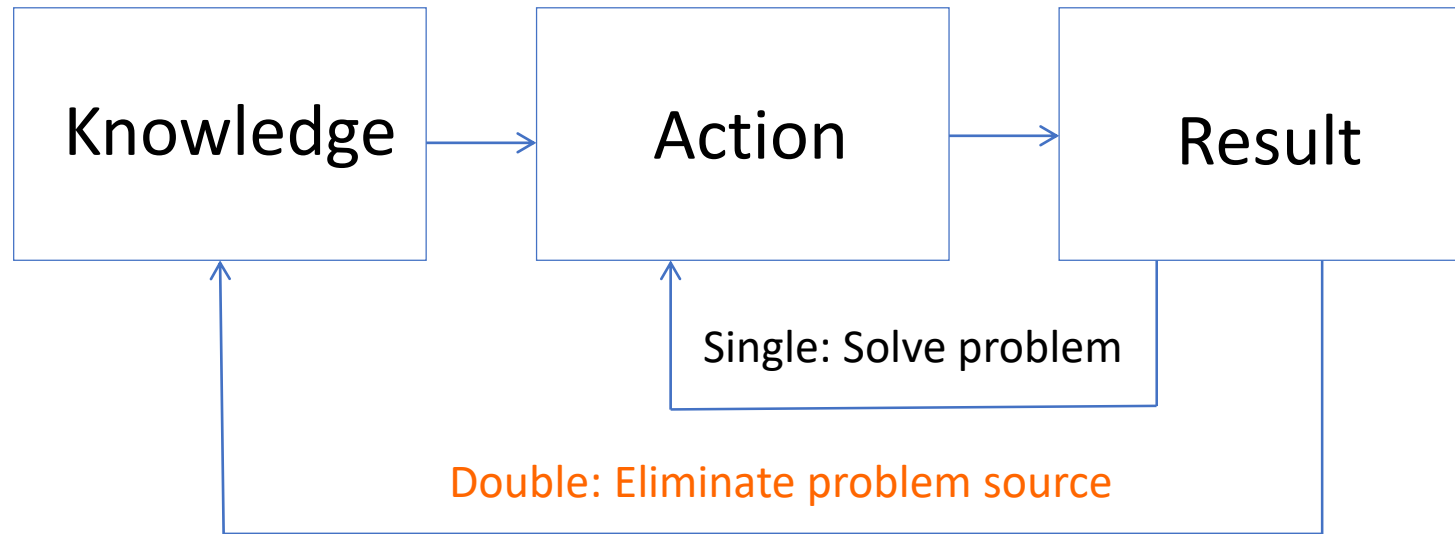# Smart Maintenance

Sustainability Circle

Sustainability Circle

- Think tank
- Mission: Industrial Sustainability through Smart Maintenance
- Founded 2010
- 45 principals (industrial production, infra structure, hospitals)
- 100 – 120 events per year

Starting point

- Industrial Sustainability is about enginering - not PR
- 100 000 employees
- 10 000 managemers
- Ironically: "Nisse with the bucket"
- OEE (Overall Equipment Effectiveness) < 55%
- Yearly financial costs of break downs: > 100 000 000 000 SEK

Step 1: From single to double loop learning

Step 2: Digitalization

- Technology is following patterns

- Pattarens can be recorded

- Recorded papperns can be used for prediction (single loop learning) and cause effect analysis (double loop learning)

Object   Process   Object

External/internal R&D   Smart Produktion   Externt/internt maintenance
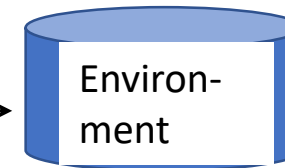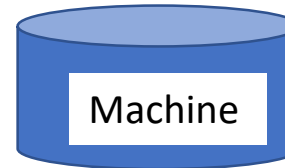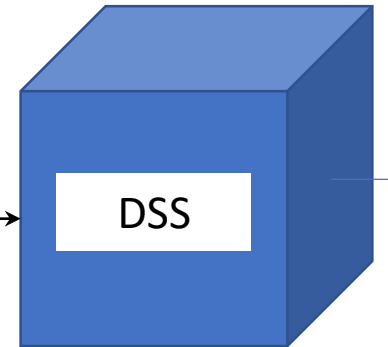
Big data

Reskilling
Upskilling

Upcycling   Reuse   Machine

Recycling   Products

Staff

Environ-ment

5G   DSS

Algorithms

Step 3: Integration

- Digital vs analogue technology
- Digital vs digital technology
- Internal horizonal integration
- External horizonal integration
- Top management vs operational level
- Artificial intelligence vs cognitive

Thoughts?

Thank you!