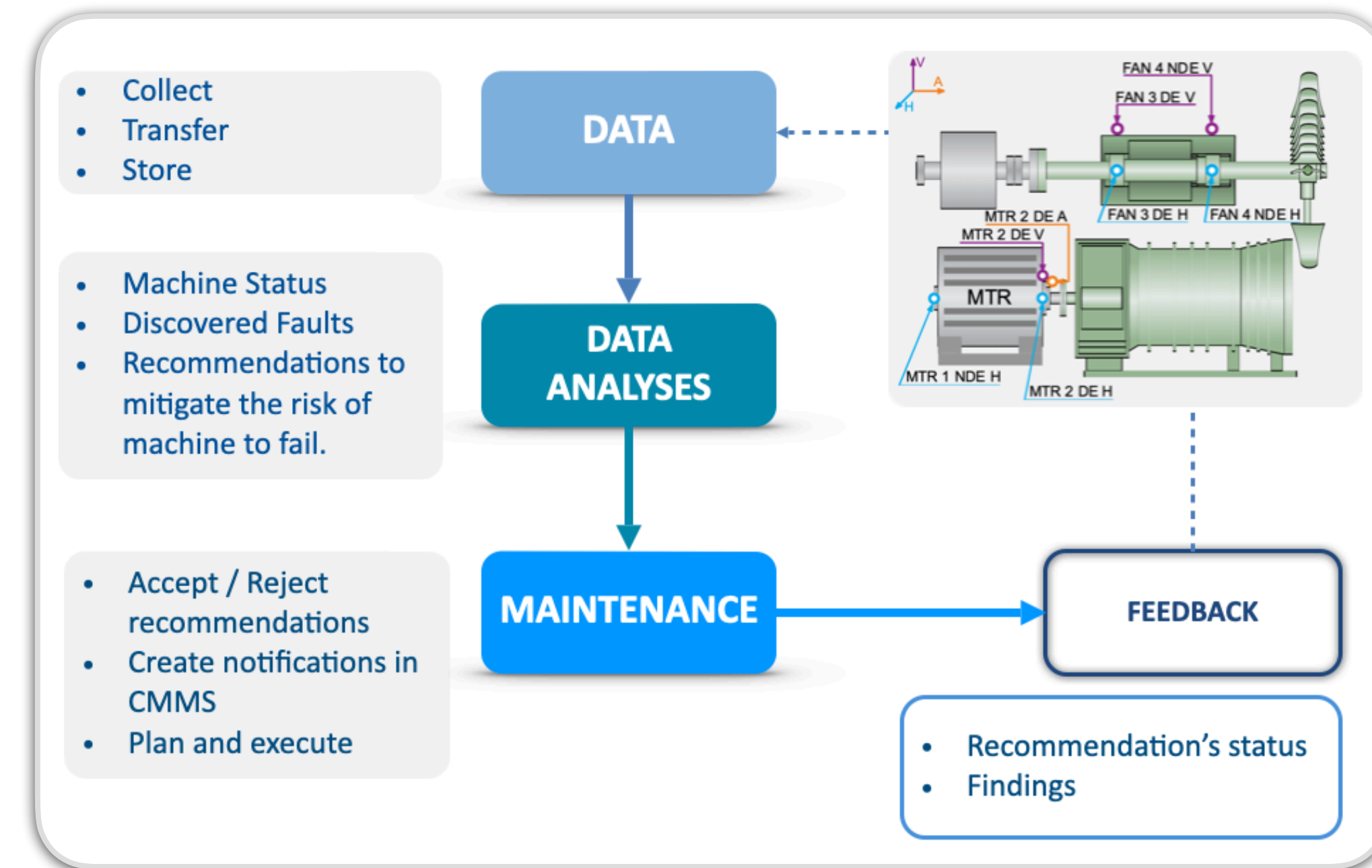


## What is the cost of executing CBM strategy?

- ▶ Implementing CM Program
  - ▶ Data collection technology
    - ▶ Hardware
    - ▶ Software
  - ▶ Building the CM database
  - ▶ On site installation of CM Points
  - ▶ Training of the personal to use the CM HW&SW
- ▶ Regular data collection
- ▶ Data analyses
- ▶ Software and Hardware fees
- ▶ Integrating CM information into maintenance management system.
- ▶ Executing planned CBM work orders



CBM: Condition-based maintenance  
ROI: Return of investments

Let's assume that you monitor 50 crucial to operation functional locations.

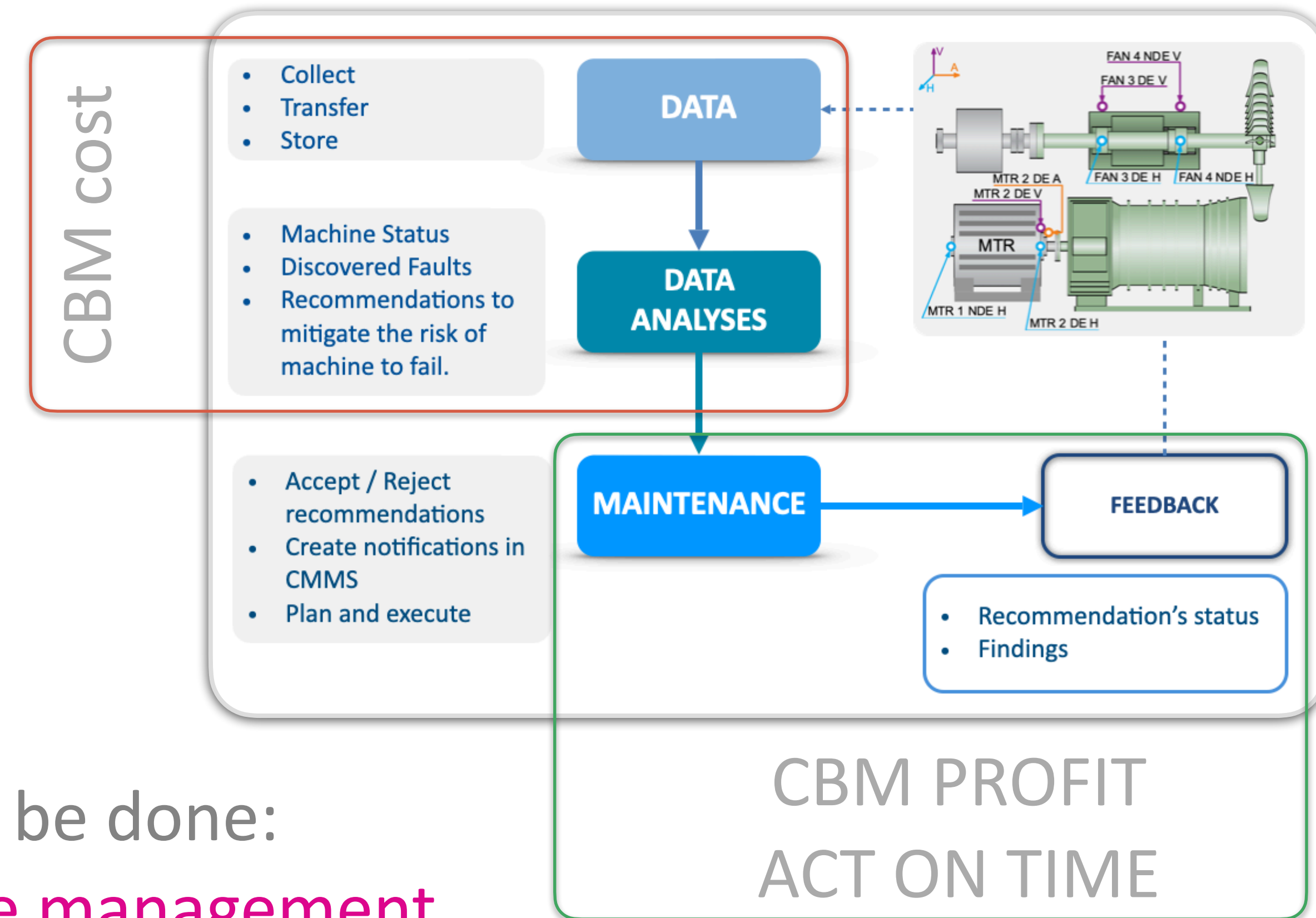
	Cost in €	Cost center	Qty	Item cost in €	Total in €
Implementing CM Program	4725.00	CM Hardware	1	1800.00	1800.00
Implementing CM Program per year	2362.50	CM Software	1	0.00	0.00
		Building the CM database	50	11.00	550.00
		On site implementation	50	47.50	2375.00
		Training	1	0.00	0.00
Regular data collection from operators yearly	3000.00	Average 30s per CM point monthly	250	1.00	250.00
Data analyses yearly	12000.00	Average price per analysis per machine monthly	50	20.00	1000.00
Software fees	660.00	Per site and users	1	660.00	660.00
<b>Total CBM cost per year in €</b>	<b>18022.50</b>				
<b>Average CBM cost per machine yearly in €</b>	<b>360.45</b>				

CBM: Condition-based maintenance  
ROI: Return of investments

# CBM COST: Turn it into PROFIT

## What is the cost of executing CBM strategy?

- ▶ The cost to get information with ReSES.net
  - ▶ **1 € per machine per day**
  - ▶ 365 € per machine per year
  - ▶ 18022 € per year for 50 machines



To turn the cost into profit the following **MUST** be done:

- ▶ **Integrating CM information into maintenance management system.**
- ▶ **Executing planned CBM work orders.**

CBM: Condition-based maintenance  
ROI: Return of investments

## What is the ROI of executing CBM strategy?

$$\text{CBM ROI} = \frac{\text{Avoidable Lost} + \text{Reduced Cost}}{\text{CBM Cost}}$$

### NOTE:

The ROI depends on the company maintenance culture.

The benefits are:

- ▶ **Avoidable lost** as result of preventing the worse case scenario (Act On Time).
- ▶ **Reducing the cost** of work order execution due to better planning.

Think about:

- ▶ How much does one hour of **production lost cost**?
- ▶ How many hours will take to fix unexpected **machine failure**?
- ▶ How much is going to cost you to buy a **new equipment**?