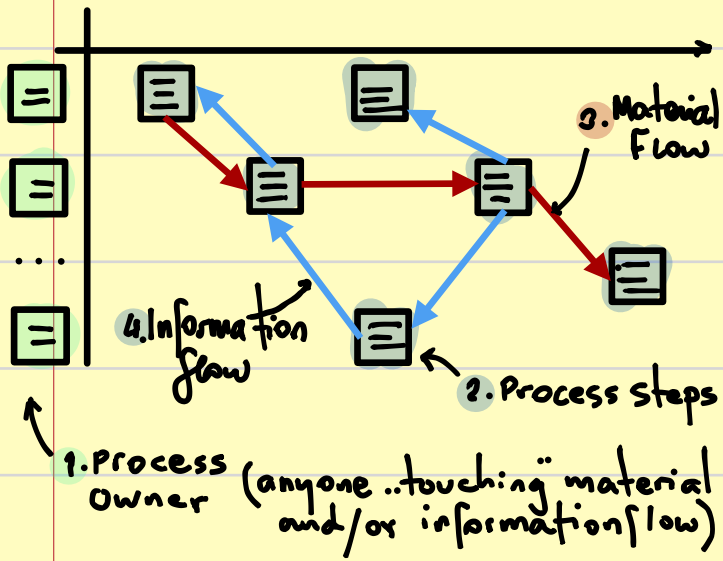


Global Supply Chain Networks

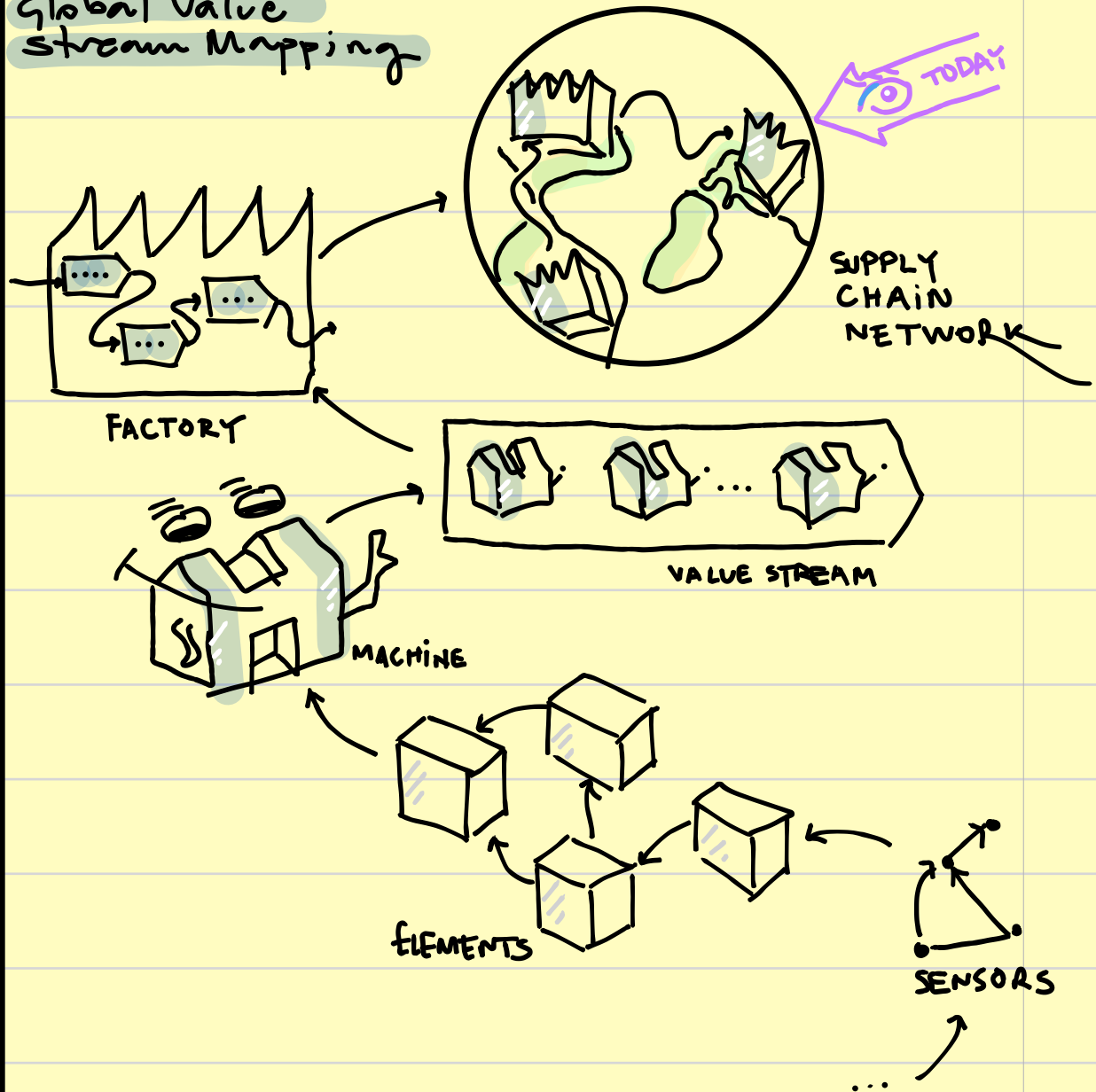
CASE STUDY. Michigan-based company. Supplier for Automobile Windshield-Wipers

CURRENT STATE → IDEAL STATE

Mapping Processes:



Global Value Stream Mapping



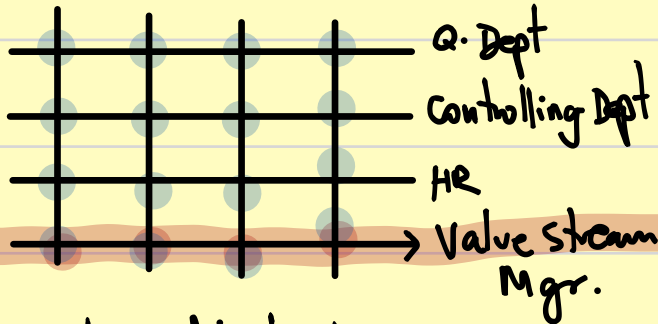
Exercise: Map one day of your life with this method.

Case Study:

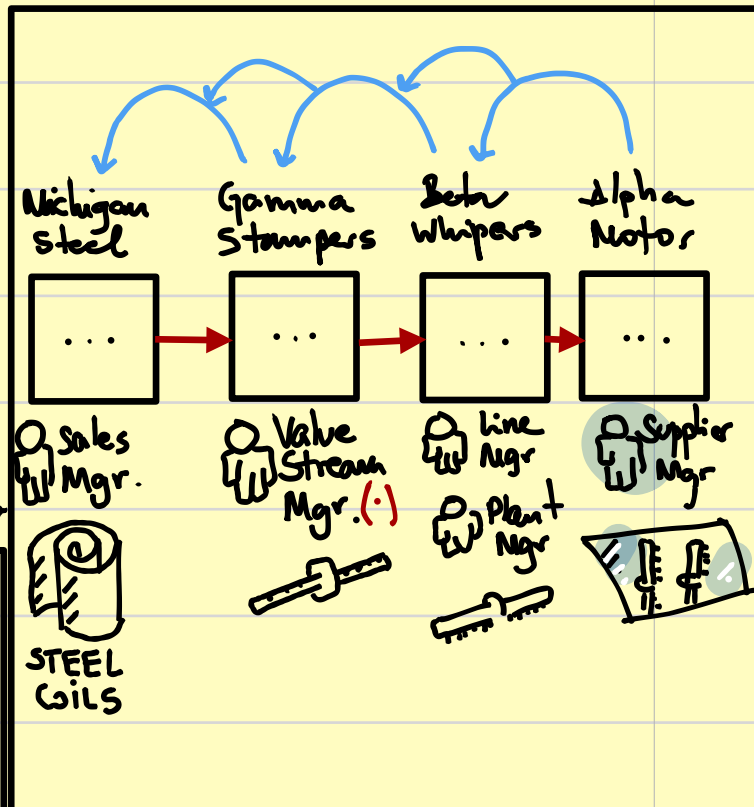
- 4 factories. We try to first map the current state.
- We need one Value Stream Team with at least one responsible for each facility.

(.) Value Stream Mgr.

Functional roles



we play the role of the supplier manager @ Alpha Motors.



We are going to map the GLOBAL VALUE STREAM of the entire process we deal with.

- The leader of the Value Stream Team is the customer (S.M. @ α -Motors).
- You need to go to the facilities physically! (GO and SEE)

- In order to map the process activities you'll need approximately one month.

| List of | # TOTAL STEPS | # VALUE CREATING STEPS (.) | # TOTAL TIME | # VALUE CREATING TIME |
|---------|---------------|----------------------------|--------------|-----------------------|
| ... | ... | ... | ... | ... |

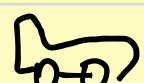
| | | | |
|-----------------------|--------|----------------|--|
| Summary: | | | |
| Steps | 73 | 8 | |
| Time | 44'3 d | 54'7 min | |
| | Total | Value Creating | |
| Distance: 53000 Miles | | | |
| #Transport links: 7 | | | |

(.) Value Creating: Whatever the customer is ready to pay for.
(Wertschöpfend)

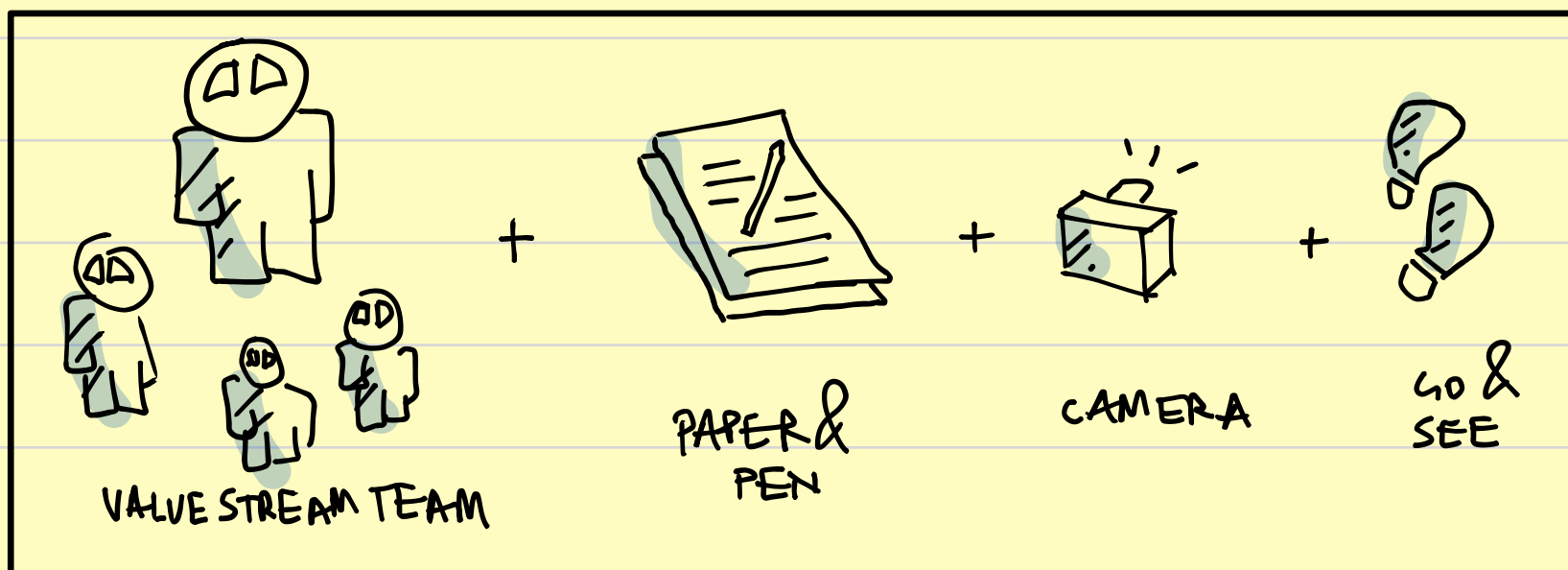
$$\frac{54'7 \text{ min}}{44'3 \text{ d}} \sim \frac{1/24 \text{ d}}{44'3 \text{ d}} \sim \frac{1}{10^3}$$

The managerial interpretation is that for every value creating minute we have 1000 non-value creating minutes.

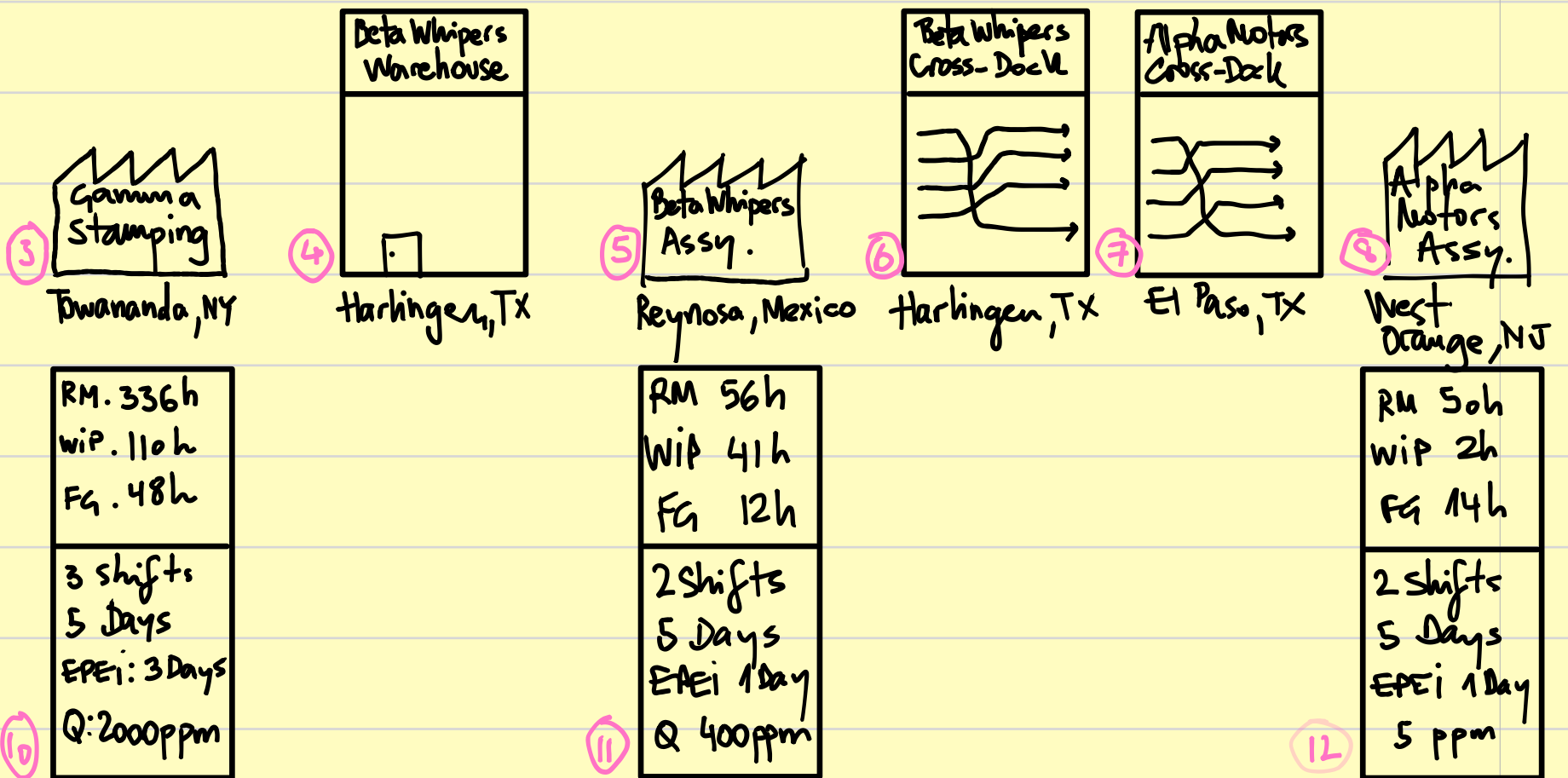
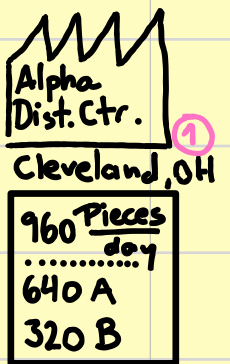
The customer pays for 10^3 units of time while they are only getting one unit of time in value creation!

Benchmark  : TOYOTA $\frac{1}{300}$

The information is useful but not actionable.
We need to map the process (current state) so that managers can act on it!



CURRENT STATE MAP



RM: Raw Material Inventory [h] (coverage time)
WIP: Work in Progress Inventory
FG: Finished Goods Inventory

