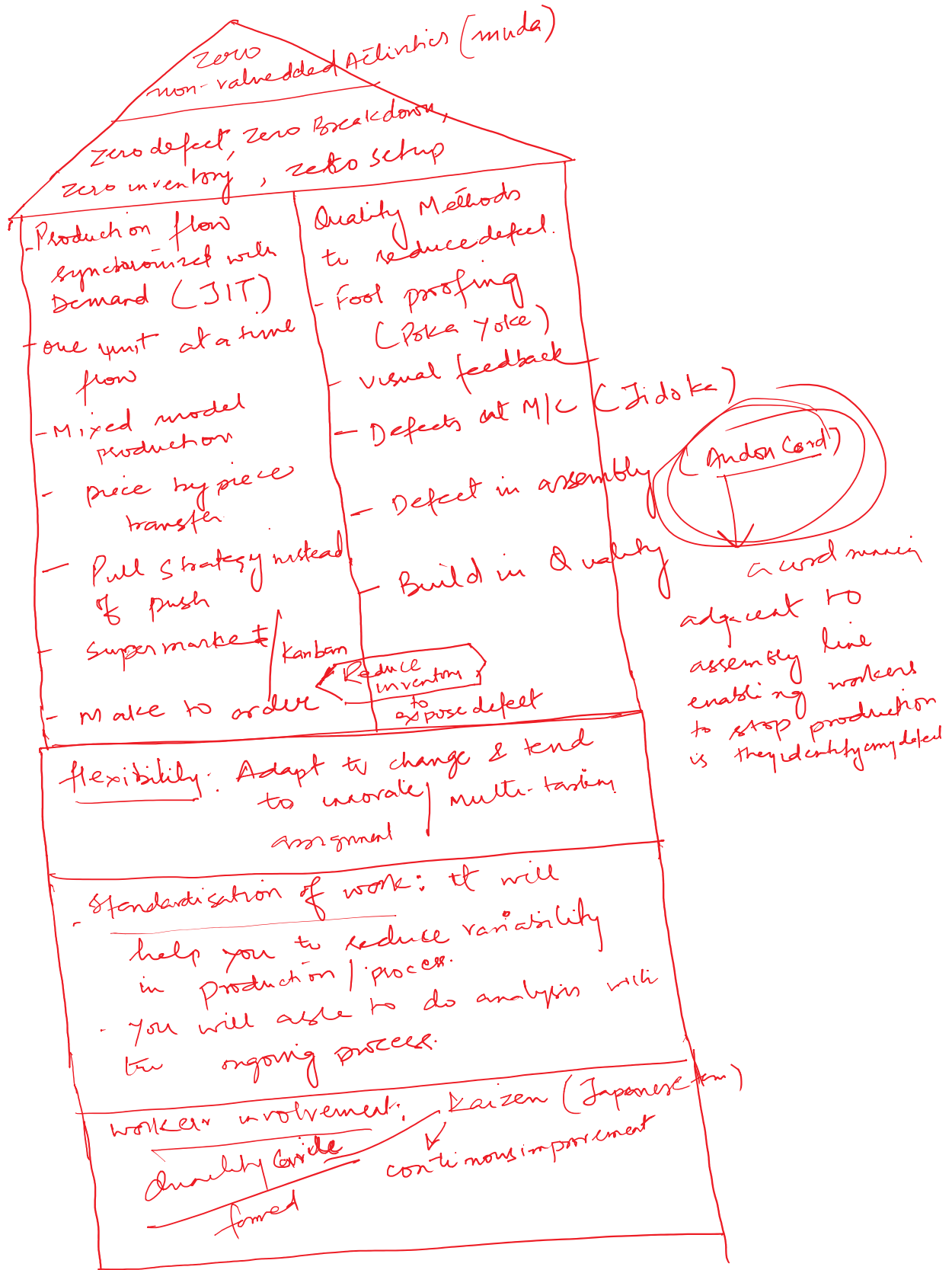


Toyota Production System framework.



History of TPS

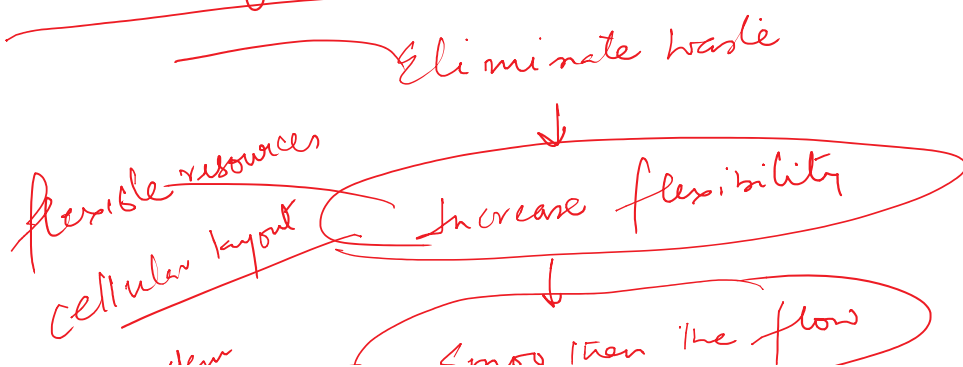
. 1st time 1948 & 1975

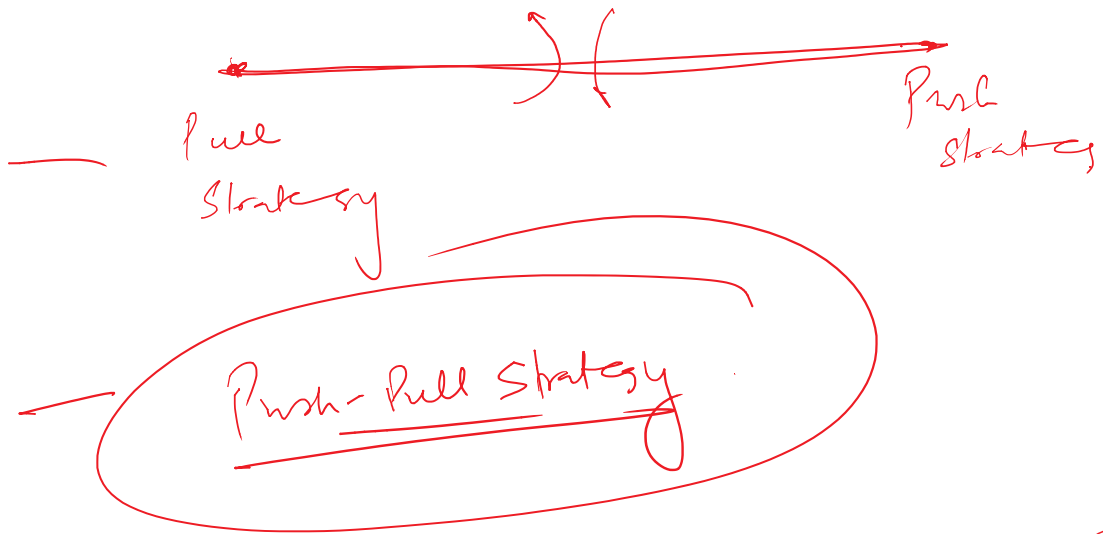
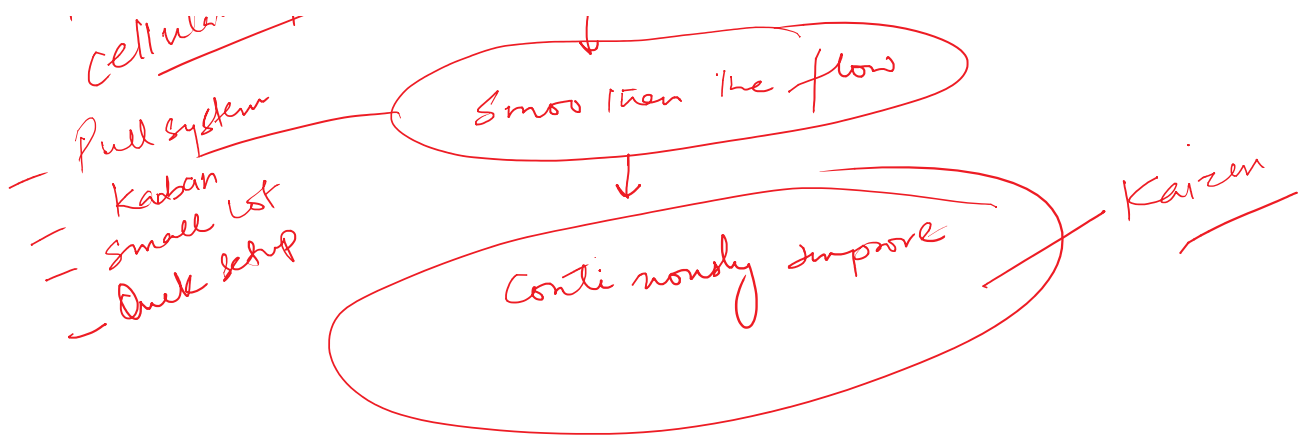
History of

TPS was developed b/w 1948 & 1975

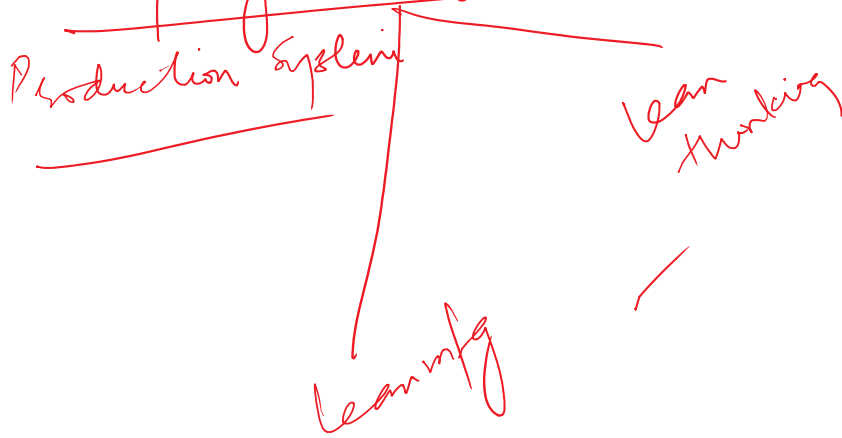
- Japanese Industrial engineer Taiichi Ohno & Eiji Toyoda are the two primary individuals that credited with the development of the system.
- Today's Toyota is recognized as a market leader in auto mfg. industry & most other manufacture use TPS at least in some fashion
- TPS is recognized as major contributor to the development of lean manufacturing & many other lean concept which are familiar with today.
- No matter the type of facilities being run, learning about TPS case help & inspire innovation & prepare a company to implment a variety of workplace environment.

Elements of Lean Production System





Lean Management 2.14 Principle of Toyota



Objective of lean mfg principle:

Eliminate everything that doesn't add value

is a ...
value from the customer's eyes. Through
our organization will able increase productivity
& create greater customer value while utilizing
available resources.

Principle 1. It is Base of your management
decisions on a long term philosophy, even at the
expense of short-term financial goal.

① work, align & grow the whole organization
toward a common purpose that is bigger than
making short-term money.

② Generate value for the customer, society & economy.
Be responsible for your conduct & maintain improve
the skill that enable you to produce & add value.

③ Principle 2. Create continuous process flow
to bring problems to the surface.

- i. Redesign work process to achieve high value added,
continuous flow i.e. no sitting idle or waiting for
someone to work.
- ii. create flow to move material & information as fast as
as possible & bring people together to work on problem
- iii. Provide your down line customer in production process,
with what they want, when they want & in the amount
they want it.
work in process (WIP) & warehousing
& each product.

- iv. Minimize your inventory by stocking small amounts.
- v. Be responsive to the day to day activity in customer demand rather than relying on computer schedule.

③ Use Pull system to avoid over production

- Reduce inventory forecasting better & accurate
- Better planning by means strong market communication, understand your target customer, JIT / prompt supply from the supplier. Skilled engineers & better quality control process.

④ Level out the workload (work like a rotation, not in haste)

Heijunka

- Eliminate waste is just 1/3rd of the situation
- for making lean P.S.
- eliminating over burden to the people, equipment, eliminating unevenness (var-hor) in the production schedule.

⑤ Build a culture of stopping to fix problem, to set quality right at the first time.

... our value

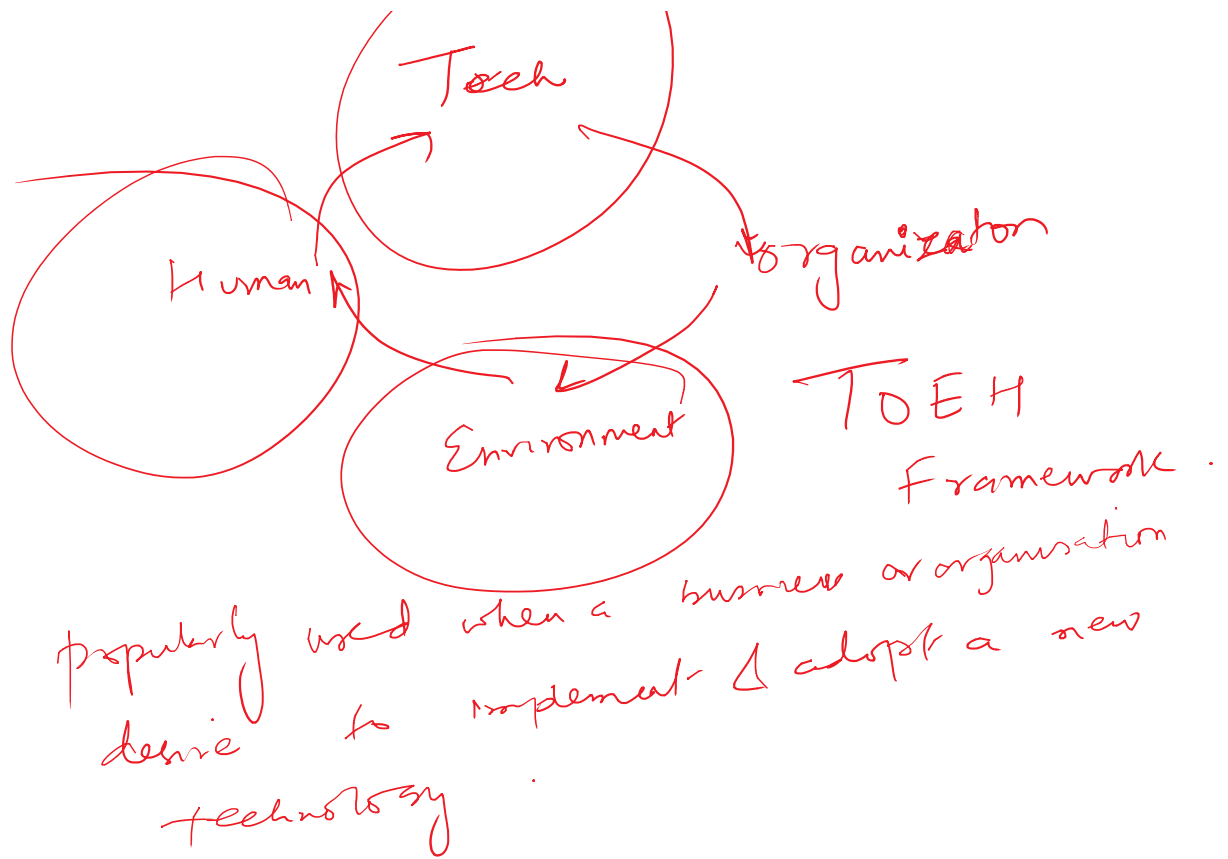
- Quality of the customer drive 70-
Proposition
- Use of modern Quality assurance tools / method
for maintaining & controlling the quality
- Build into your organization support system so
quickly solve the problem & put a right
measure in place (Quality circle team)
- Build into your culture the philosophy of
slowing down to get quality at the first
place to enhance productivity in long
run.

⑥ Standardized tasks are the foundation for
Continuous Improvement & employee-empowerment
- SOP to maintain the predictability.

⑦ Use visual control so no problem are hidden.
- Use graph or visual indicators to help people
to determine immediately whether they are in standard
condition or deviating from it.

⑧ Use only reliable, thoroughly tested technology
that serves your people & process

Tech



(9) Grow leaders who thoroughly understand the work, live philosophy & teach it to others.

(10) Develop exceptional people & team who follow your company's philosophy.

- Create a stable culture, value, beliefs ~~which~~ which are widely shared & accepted over a period of years in your company.

- Train your ~~exceptional~~ exceptional individual & team to work with in which helps to achieve exceptional results

(11) Respect your extended network of partners & challenging & helping them

11) Respect your external supplier by challenging & helping them to improve.

12) See your situation thoroughly to understand the situation (Genchi Gemboku) (Gembu)

13) Make decision slowly by taking a ~~thorough~~ consensus from cross-functional team & thoroughly considering all the alternative options & finally implement decision rapidly.

14) Become a learning organization through relentless reflection & continuous improvement (Kaizen) → (hansei)