Learnings from other industries for futuristic operations

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6 learnings I have found most relevant

1. Culture & Execution eats Strategy for breakfast, lunch & dinner

2. Make sure you are Agile enough to stay relevant in eyes of customer

3. Build Quality into design & process to reduce reliance on end of line testing

4. Assets produce medicines, humans manage assets

5. Autonomous frontline is at the core of robust performance

6. The most productive operation is where there’s no human intervention
1. Strategy Deployment Process (SDP)

- Multiple tools exist – **Any tool is good if deployed to it’s full potential**
- ‘X matrix’ used by Danaher for execution of strategy plan, involves **breaking down of strategic priorities into series of one-year goals (Targets To Improve)**
- Improvement priorities **cascaded to “Point of Impact”** with clear emphasis on breakthrough initiatives
- Ensures **none of the interdependencies get left out**
- Acts as **catalyst for cross functional collaboration**
- Robust governance critical to success of strategy deployment
2. Agile Delivery System ensures customer loyalty

- Innovation in manufacturing flow as a **structural advantage**
- Hyper competitive markets like FMCG do not distinguish between large & small customers
- Enterprise-wide **Value Stream Mapping & end-to-end lean implementation** to cut down demand to delivery cycle time
- Build **flexibility in manufacturing systems** to service orders faster / reduce lead times
3. Build Quality into design & process to reduce reliance on end of line testing

- Building **Six Sigma Quality at design** is far less intensive effort compared to quality improvement at commercial state.

- End of line testing is **statistically bound to fail**. Semiconductor industry does end of line testing only for verification.

- Move towards **predictable outcomes** (golden tunnel / golden batch) using data & analytics.

- **In/On-line testing to influence process** rather than to rely on testing to decide batch fate.

- Focus more on hiring **TPM / TQM talent** rather than investigators as a reaction to handle failures.
4. Assets produce medicines, humans manage assets

- Robust assets deliver **zero – breakdowns, interventions & minor stoppages**

- Develop balance between **upskill & deskill for frontline** handling the machine
  - Upskill machine maintenance (not operation)
  - Deskill repetitive operations like changeovers

- **Zero touch during machine run time**
  - Humans touch the machine only before-start and after-end of manufacturing
5. Autonomous frontline is at the core of robust performance

- Autonomous / Self managed team – fully capable of operating to prescribed standards
- Leaders drive transformation
- Develop a ‘Manager Model Area’ – replicate across the plant & across the network
- Hire inclusive talent – A lot of problems have already been solved somewhere in the world
6. The most productive operation is where there’s no human intervention – Lights out

• **Create zero failure environment** – Processes, Assets & People

• Human bandwidth freed up for **problem solving and driving transformation**

• **Unconstrained capacity unlocked**, unhindered value stream flow

• Enhanced **quality, delivery & compliance** with no intervention
Thank you!