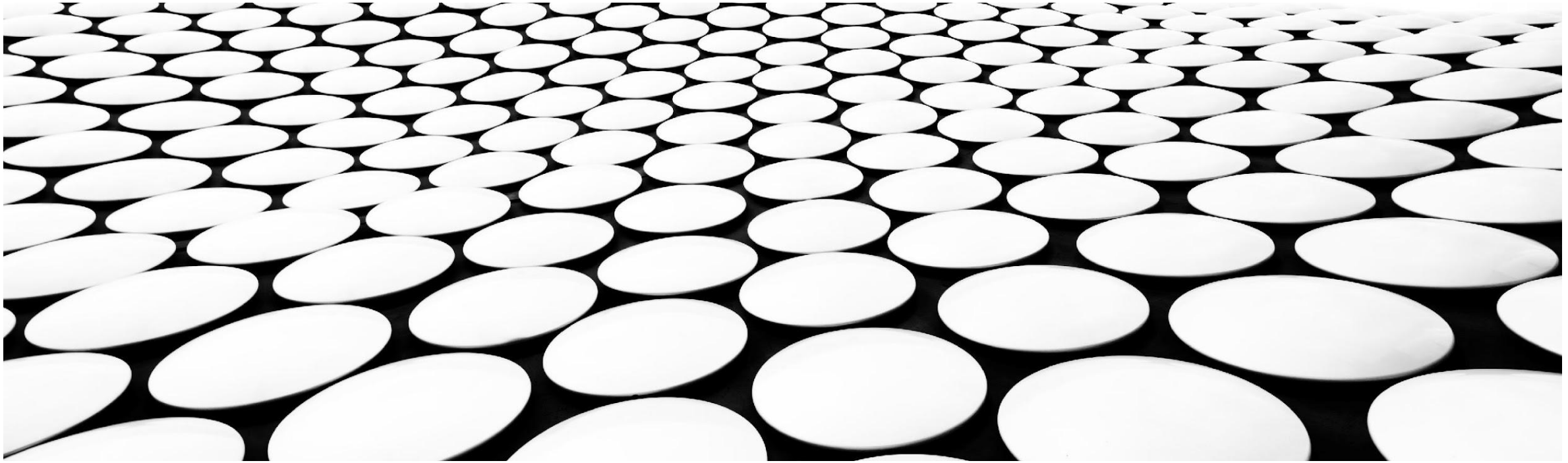
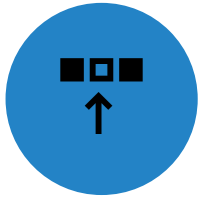
GE VENTILATOR FLUCTUATING DEMAND



AGENDA



Executive Summary

Data Analysis

Value Stream Map Findings

Current & Future Challenges

Summary/Next Steps

EXECUTIVE SUMMARY

Problem : Ventilator demand in surge, but ventilator supply constant

Reason : Unexpected emergence of the fatal COVID-19 pandemic

Solution : Identifying and addressing bottlenecks in the production process

DATA ANALYSIS

IQM and SD of Actual data :

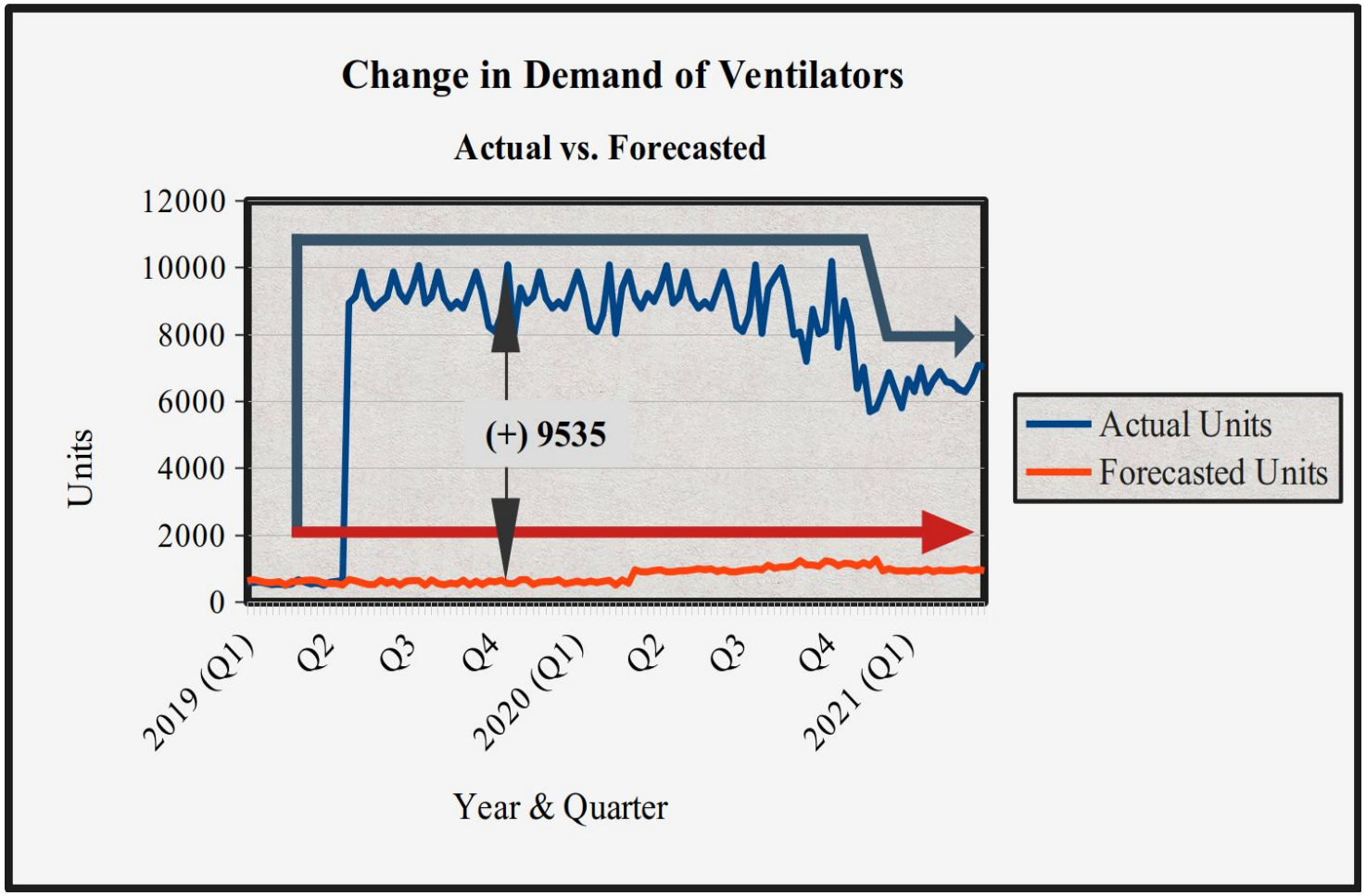
8406.9 & 752.05

IQM and SD of Forecasted data :

766.9 & 148.6

Difference in the two averages :

7639.9



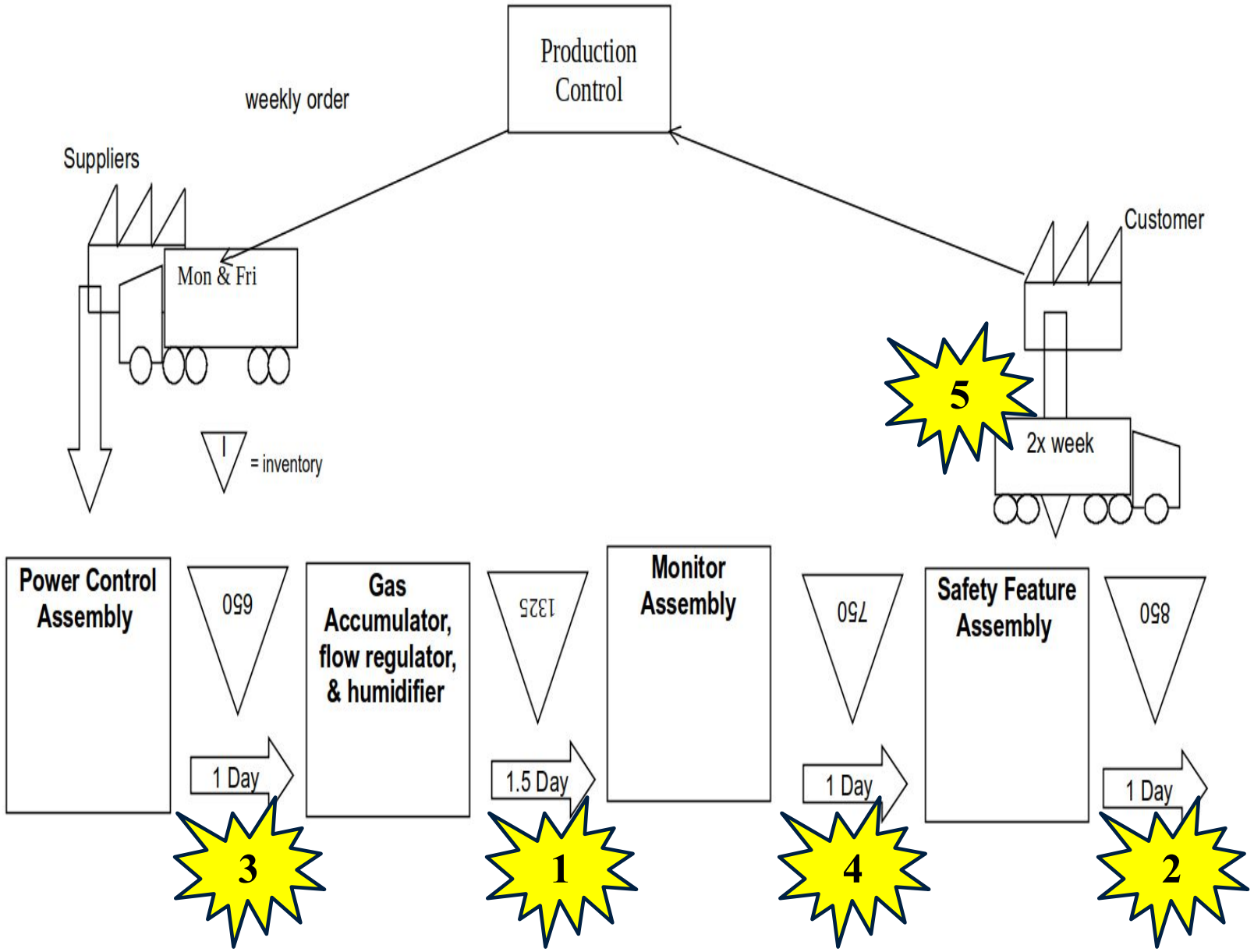
VALUE STREAM MAP FINDINGS

Bottlenecks are similar at all four inventories, with the largest one being at the **second inventory**.

No inventory management or scheduling system exists.

Takt time of 314.53 seconds is less than the total process cycle time (CT/VA) of 351 seconds.

Delivery is either stagnant, or untimely.



CURRENT & FUTURE CHALLENGES

People

- Pandemic (demand) forecasting
- Government restrictions and regulations
- Talent acquisition, HR management, and skills development

Process

- Logistics congestion
- Raw materials and intermediate goods scarcity
- Quality assurance

Technology

- Change in engineering and manufacturing standards
- Composite and cost-effective materials
- Provisional solutions for scalability

NEXT STEPS

- Build and maintain a *rapport* with **public health officials** and **hospitals**.
- Maintain and periodically rotate a **buffer stock** (JIC). Implement the **FIFO** and **Heijunka** models (JIT) on the main inventories to avoid pile-ups.
- Implement the **Kanban** scheduling and **supermarket** management systems.
- Be prepared to reliably **rent** additional **equipment**, & **hire** temporary **personnel** at a moment's notice.