# MANUFACTURING DASHBOARD PROJECT

ENHANCING PRODUCTION PERFORMANCE & EFFICIENCY

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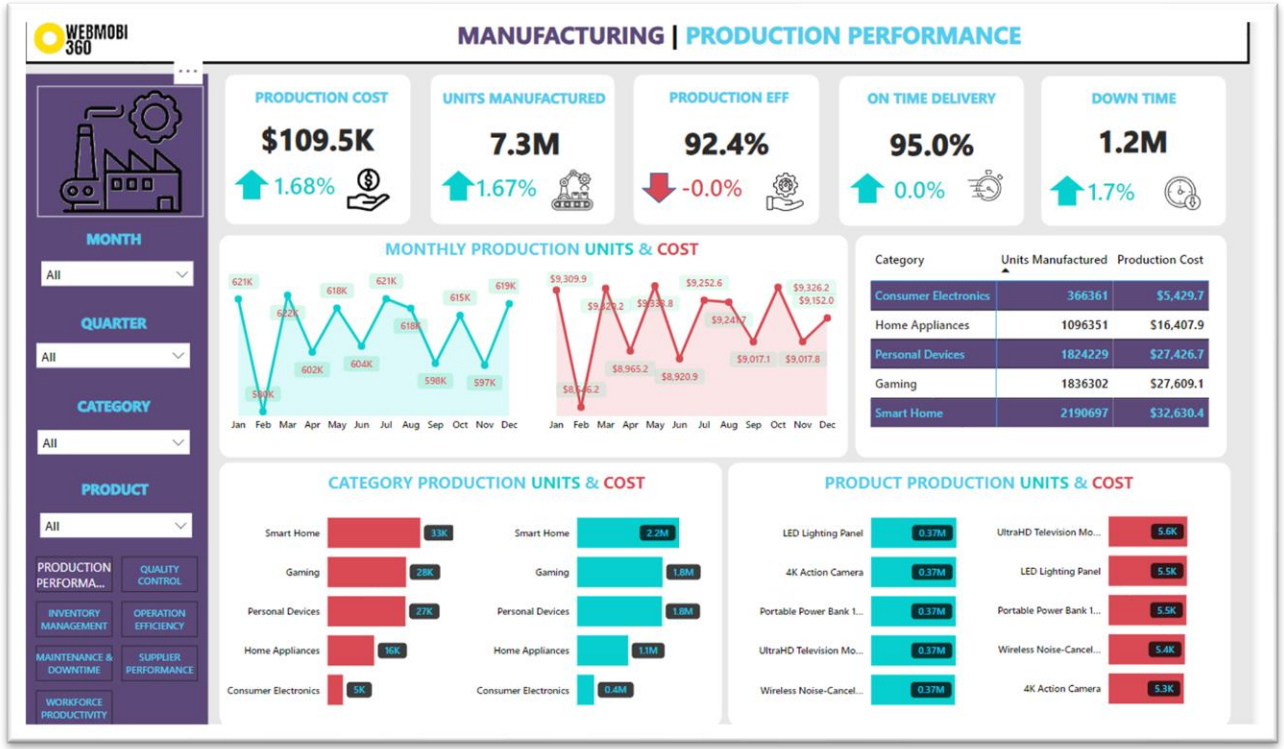
# OBJECTIVE OF THE PROJECT

- ❖Provide real-time insights into manufacturing processes.
- ❖Monitor production performance, quality control, inventory, and workforce productivity.
- ❖ Enable data-driven decisions to enhance operational efficiency.

# KEY METRICS IN THE DASHBOARDS

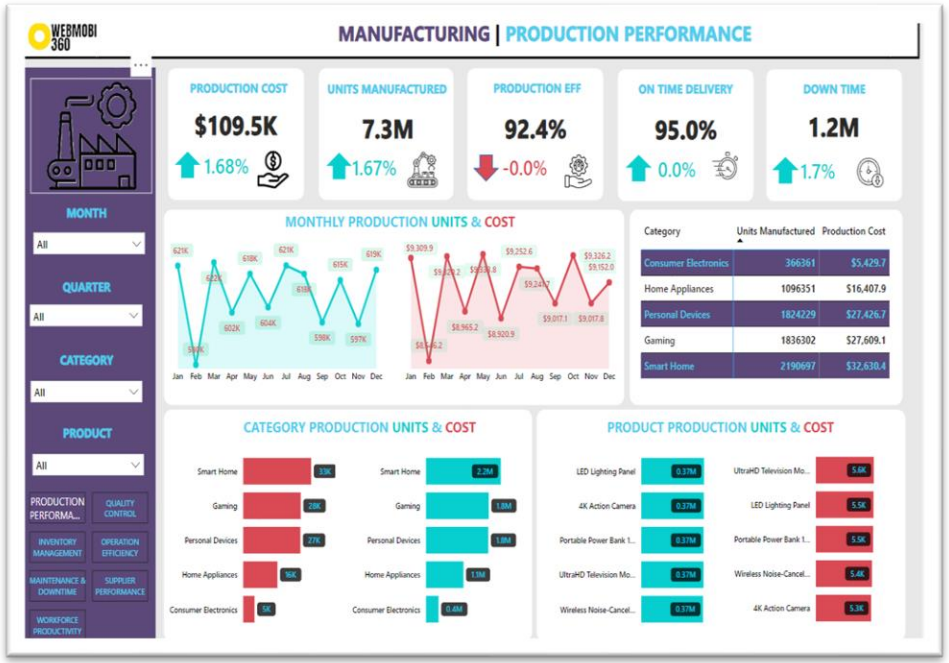
- ❑ Units Manufactured
- ❑ Production Cost
- ❑ Production Efficiency
- ❑ On-Time Delivery
- ❑ Downtime
- ❑ First Pass Yield
- ❑ Defect Rate
- ❑ Inventory Levels
- ❑ Workforce Productivity



# PRODUCTION PERFORMANCE DASHBOARD

## ❖Purpose:

Track the overall manufacturing process, including units produced, production costs, and efficiency.




## ❖Key Insights:

- ✓7.3M units manufactured, 92.4% production efficiency.
- ✓Production cost trends over months (e.g., peaks in specific months).

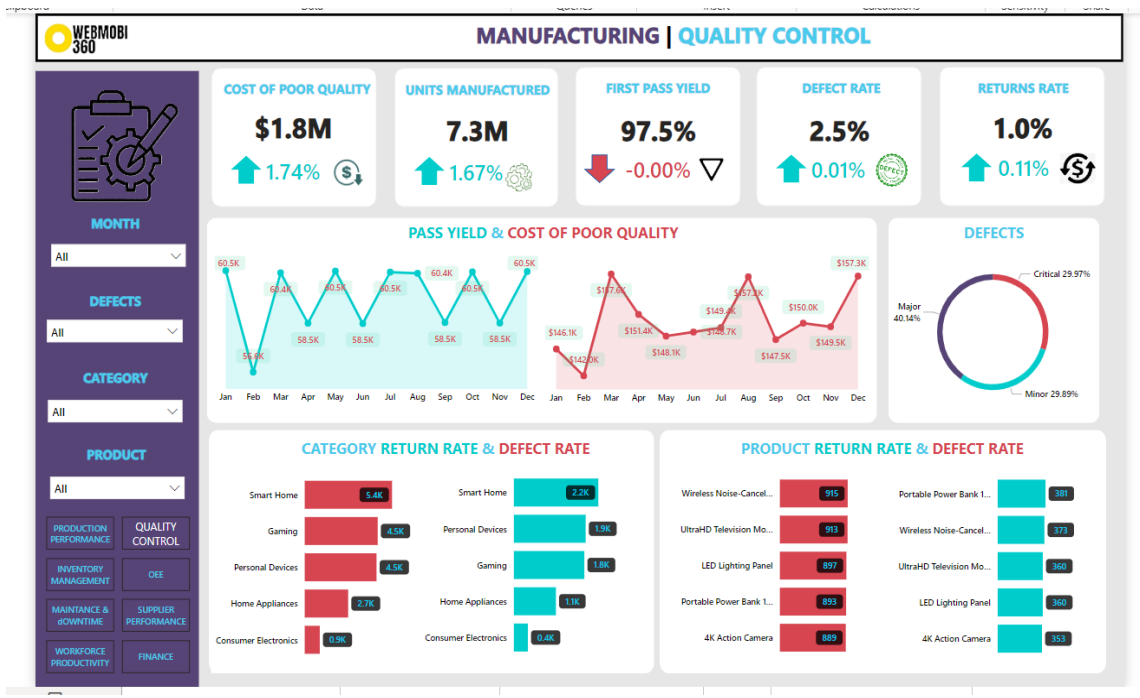
# QUALITY CONTROL DASHBOARD

## ❖ Purpose:

Monitor product defects and return rates.

## ❖Key Insights:

- ✓ Defect rate: 2.5%, First Pass Yield: 97.5%, Return rate: 0.11%.
- ✓ Focus areas: Gaming devices and Home Appliances had the highest defect rates



# INVENTORY MANAGEMENT DASHBOARD

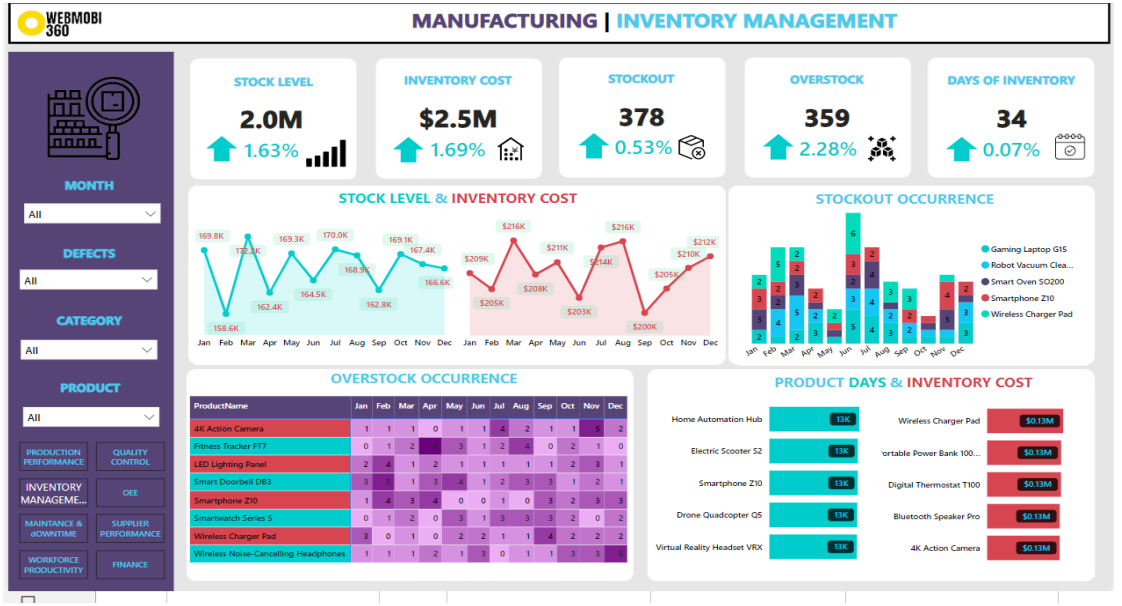
## ❖Purpose:

Ensure optimal stock levels, avoid overstocking or stockouts.

## ❖Key Insights:

✓Inventory cost at $2.5M with a stockout rate of 0.53%.

✓Overstock and days of inventory tracked across months.



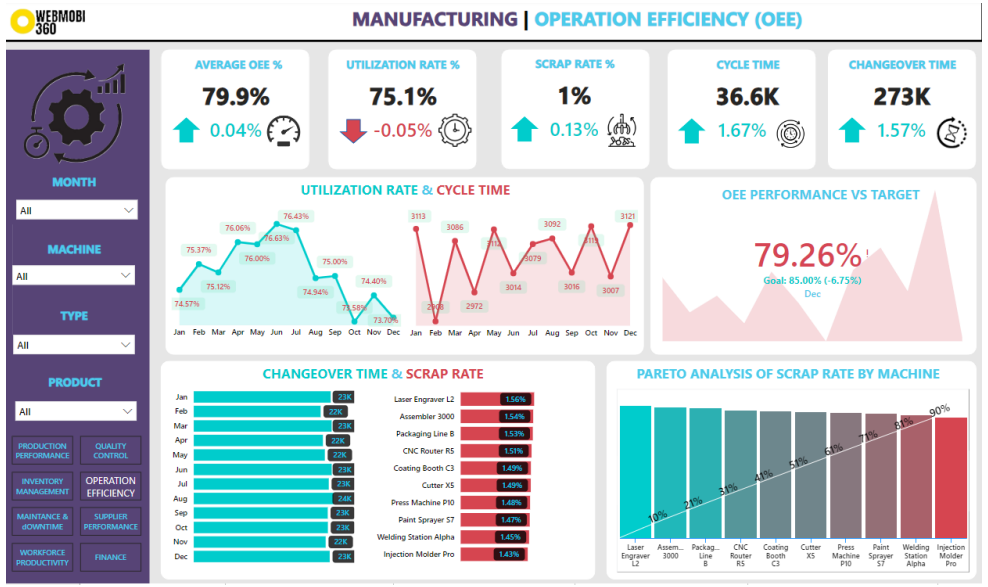
# OPERATIONAL EFFICIENCY DASHBOARD

## ❖Purpose:

Evaluate the performance of different machines and manufacturing lines.

## ❖Key Insights:

- ✓ Average OEE of 79.9%, with a goal of 85%.
- ✓ Key areas of improvement: Scrap rate, cycle time, and changeover time.



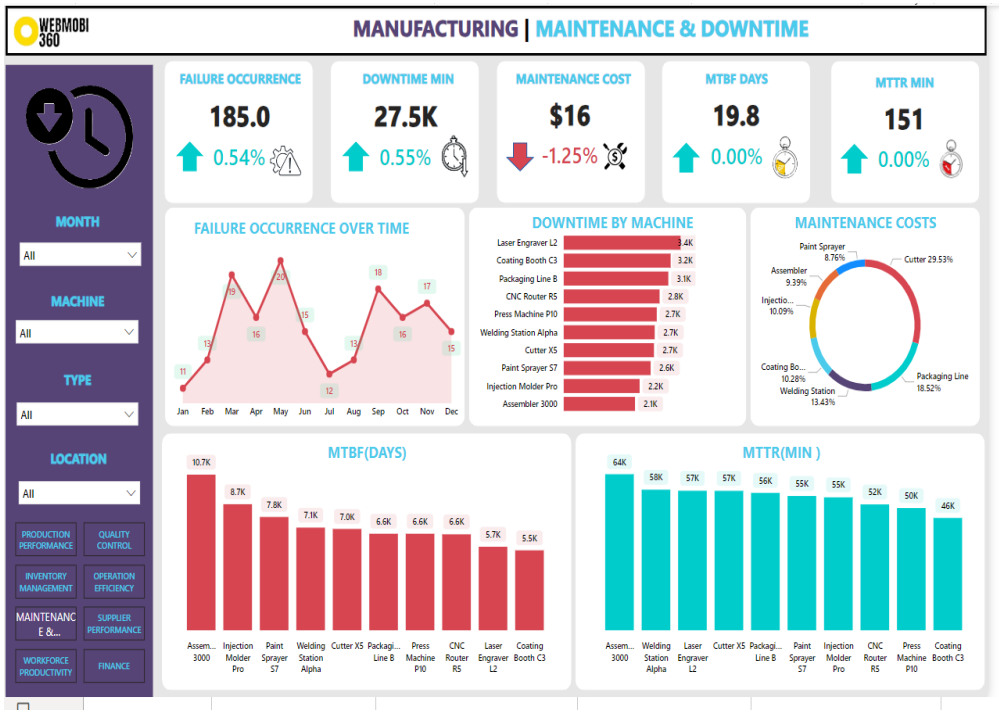
# MAINTENANCE & DOWNTIME DASHBOARD

## ❖Purpose:

Reduce downtime and track maintenance efficiency.

## ❖Key Insights:

- ✓Downtime was 1.7%, with failures occurring most frequently in specific machines like Cutter X5.
- ✓MTTR and MTBF metrics.



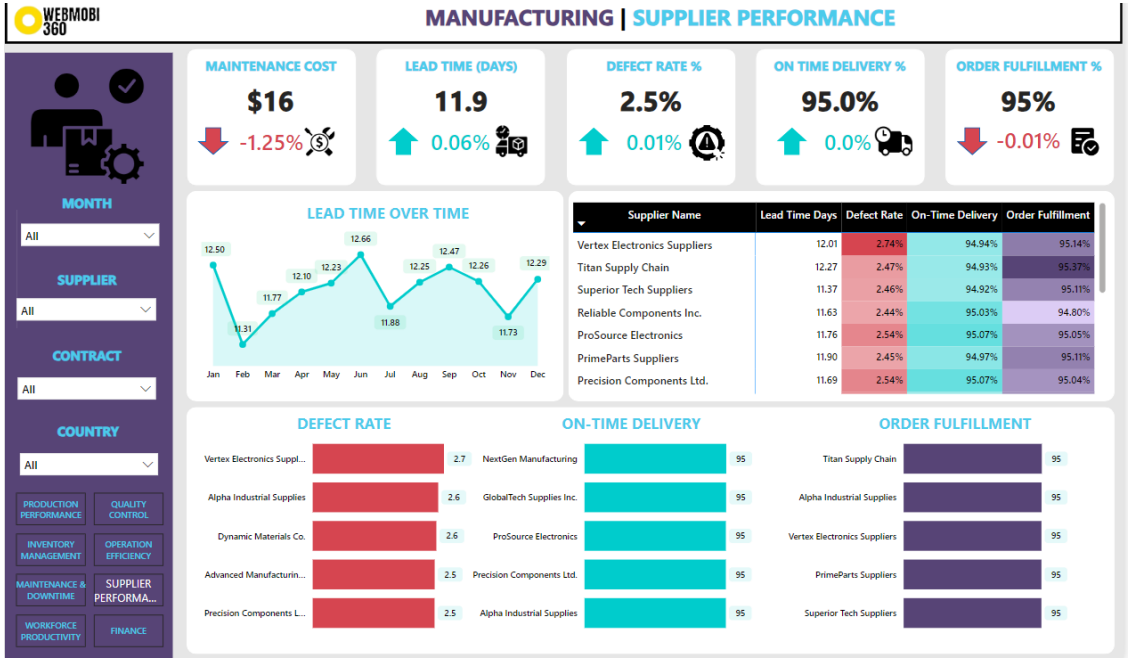
# SUPPLIER PERFORMANCE DASHBOARD

## ❖Purpose:

Measure supplier reliability based on lead time, defect rate, and on-time delivery.

## ❖ Key Insights:

✓Top-performing suppliers had 95% on-time delivery with an average lead time of 12 days.



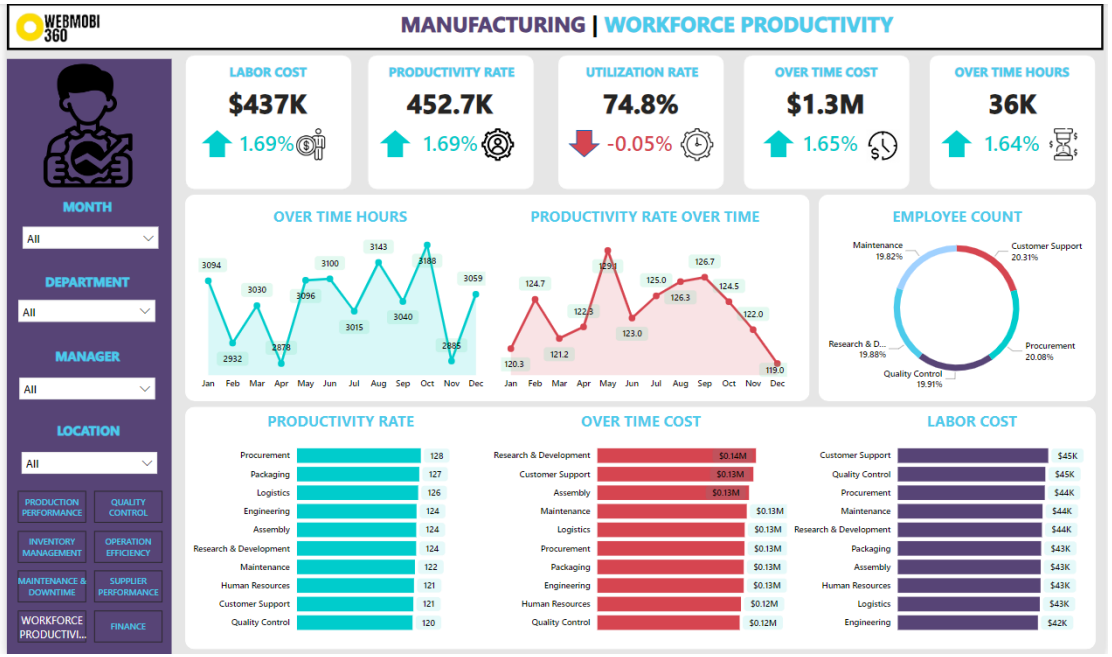
# WORKFORCE PRODUCTIVITY DASHBOARD

## ❖Purpose:

Measure labor productivity, overtime costs, and workforce utilization.

## ❖Key Insights:

- ✓ Workforce productivity was steady at 74.8%, with labor costs around $437K.
- ✓ Overtime trends identified for further analysis.



# CONCLUSION

- ✓ The dashboards provide comprehensive insights into the manufacturing process, identifying key areas for cost savings, efficiency improvements, and defect reductions.
- ✓ Data-driven decision-making enables continuous performance improvements.