Team Cross-functional collaborators

2nd Annual USC MSBA Case Competition

Team Members

Christian Ingul

Cody Greene

Tomisin Jegede

Agenda

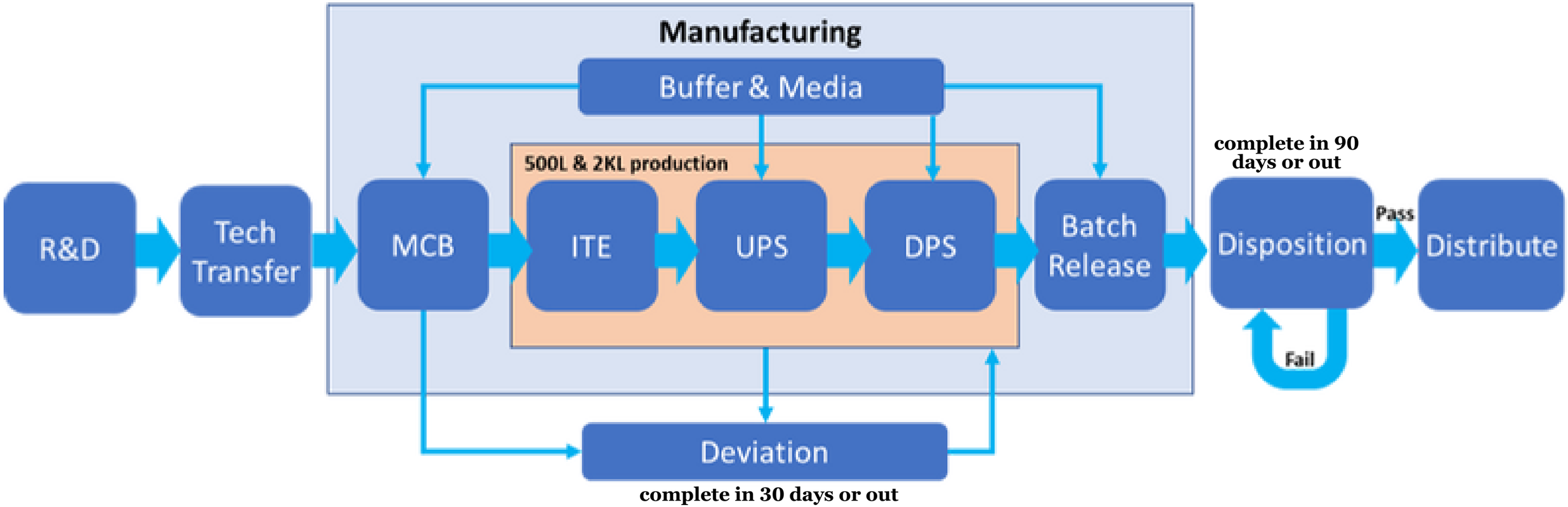
1. Product Life Cycle

2. Manufacturing

3. Deviations

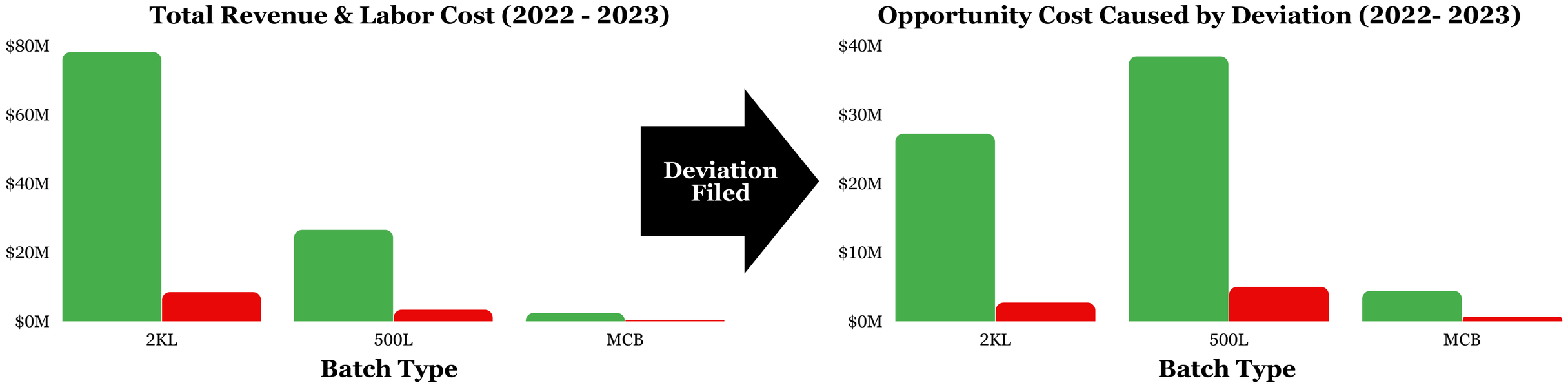
4. Conclusion

Product Cycle of Client X




Manufacturing

Revenue & Labor Cost by Batch Type



- Total revenue for the batches is **$107M**
- Total labor cost for the batches is **$12M**

- Opportunity cost of revenue for the batches is **$70M**
- Opportunity cost of labor cost for the batches is **$8M**

SO WHAT?

While 2KL batch is has the highest number for revenue & cost, the highest for deviation was 500L batch.
This indicates that 500L batch is the bottelneck and is costing the company the most in opportunity cost.

Deviation

General Deviation Trends

PROCEDURAL DEVIATIONS

- Process/Method accounts for 38% of total deviations
- 497 of these deviations were classified
- **Level III/Critical Issue - 8 (1%)**

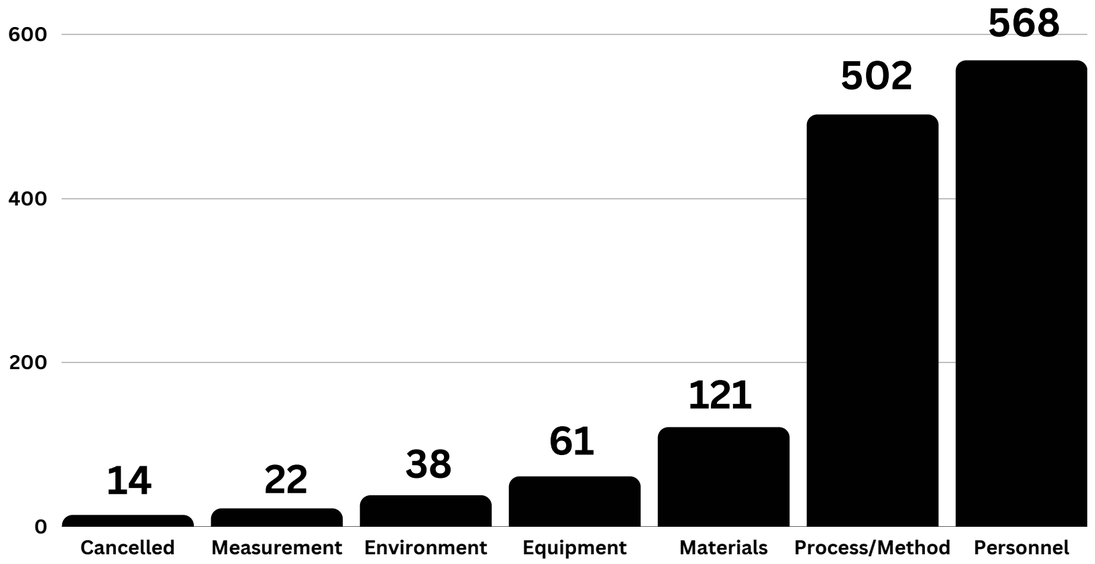
PERSONNEL DEVIATIONS

- Personnel Errors accounts for 43% of total deviations
- 563 of these deviations were classified
- **Level III/Crtitical Issue - 1 (0.18%)**

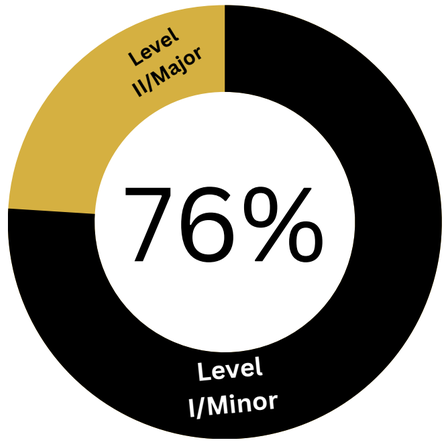
SO WHAT?

- Client X would reduce deviations by improving Personnel & Process/Method
- Critical Issues lead to lost revenue from products not reaching consumer

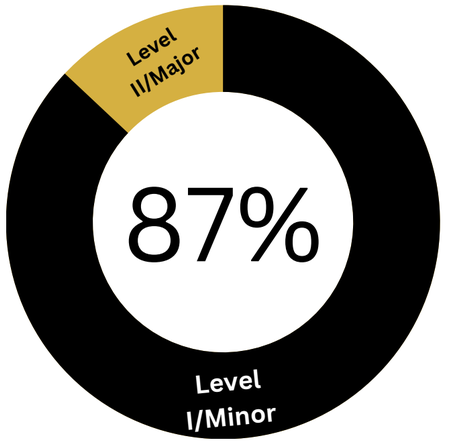
Deviation Primary Root Cause Breakdown



Process/Method Classification Breakdown



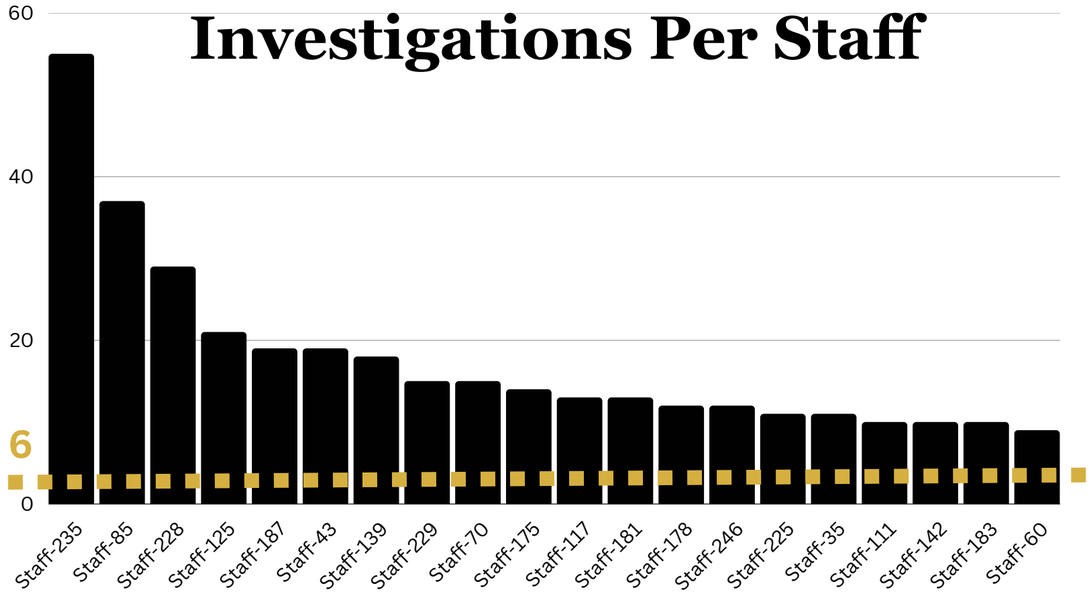
Personnel Classification Breakdown



Deviations Investigated Per Staff

OVERWORKED & UNDERWORKED STAFF

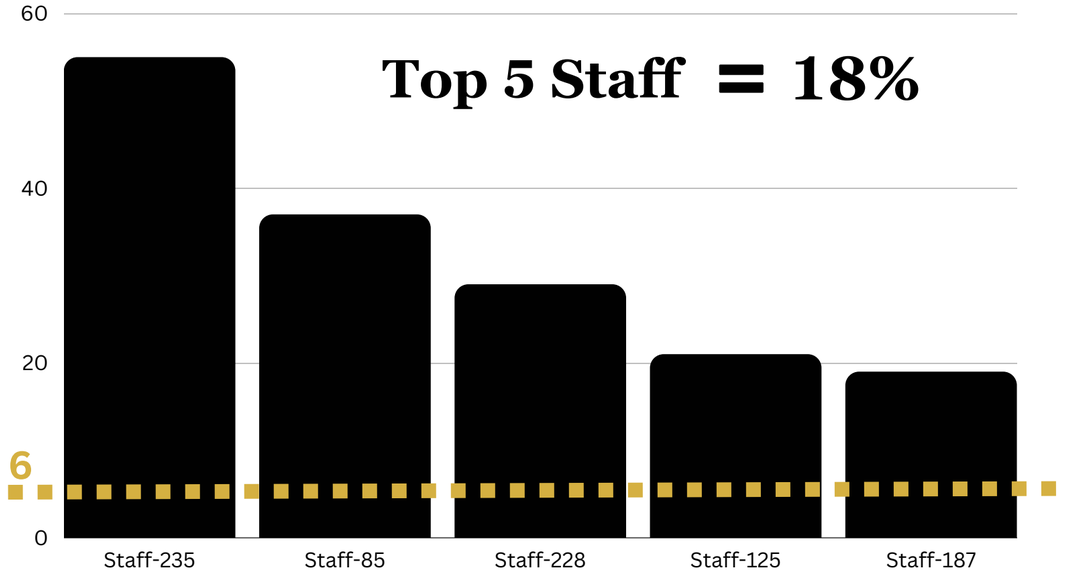
- 5 out of 109 staff members are handling up to 18% of all deviation investigations.
- Average employee handles 6 investigations, and the top 5 employers between 55 and 19



SO WHAT?

Could indicate the following:

- **Knowledge gap among workers**
- **Undergoing training/new employees**
- **Staffing Mismanagement**
- **Lack of management oversight into day-to-day worker performance**

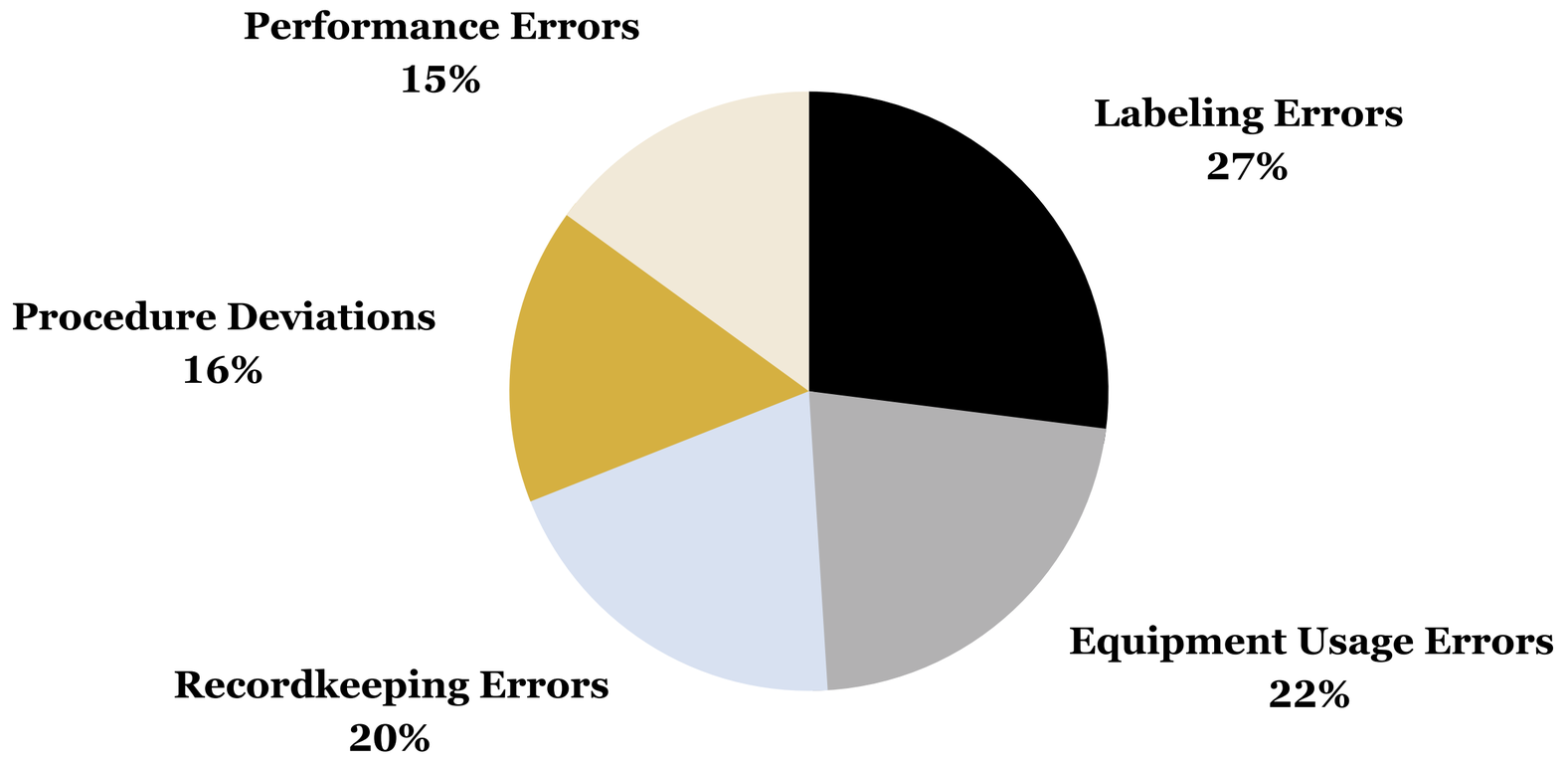


NLP Analysis

Further Analysis Supports Hypothesis

Instances of signing off on training that was never assigned

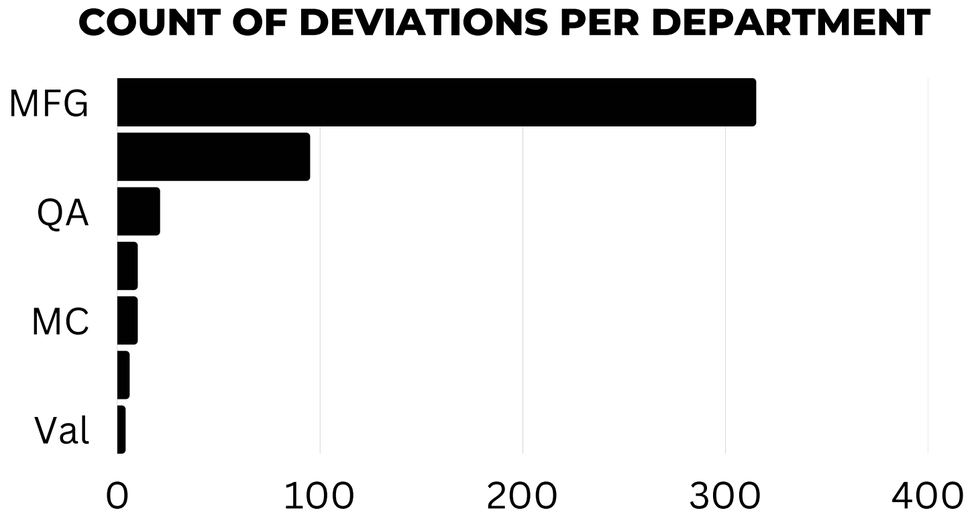
Failure to complete all the required courses in ZenQMS



Count of Deviation by Department

MAJORITY OF DEVIATIONS FROM MANUFACTURING

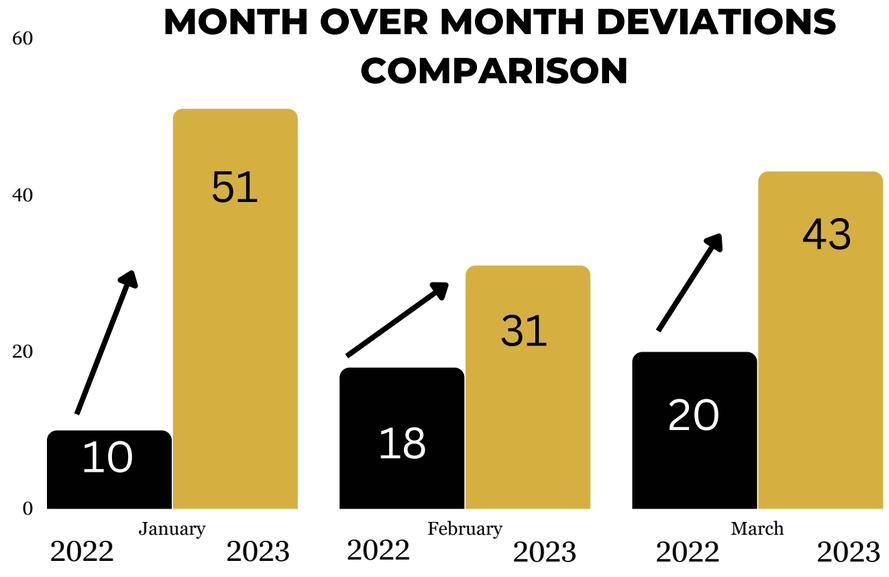
- Manufacturing Department was hit the hardest.
- A general rise in deviations year on year (2022 to 2023)



SO WHAT?

With a large proportion of Deviations in Manufacturing indicates the following:

- Significant Bottleneck Issues in Manufacturing Process
- Roadblock potential
- Increased costs



Diagnosis

Conclusion

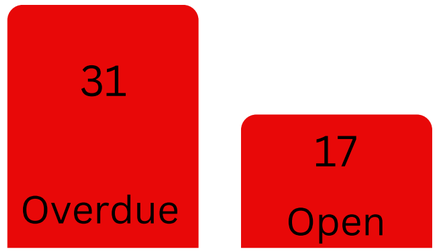
ISSUE IDENTIFICATION

After Assessing the Product Development Timeline, there are two main issues identified of focus:

- **Manufacturing**
- **Deviations**

KEY AREAS OF CONCERN

Deviation Status
(as of March)



- Majority of Deviations occur in Manufacturing stage.
- Severe bottleneck issues with repeated deviations and lack of urgency when closing out deviations.
- Personnel (Staff Utilization) and Process/Method should be targeted as areas for improvement.

NEW PRACTICES

Improved/additional training in the following:

- Motivating Better Performance (Incentives)
- Following SOPs (Increased Supervision)
- Mitigate Procedure Deviations (Best Practices)
- Equipment Usage (Tutorials)
- Labeling Practices (Extended Training/New Equipment)

STAKEHOLDER INTERVIEWS

We recommend conducting stakeholder interviews with the **5 most** involved staff:

- Staff-235
- Staff-85
- Staff-228
- Staff-125
- Staff-187


Thank
you