

DOMO Safety Analysis for Layton Construction

By Ollie Zambrano and Alexia
Wells



AGENDA

PROBLEM STATEMENT

01

DOMO DASHBOARD DEMO

02

CONCLUSION

03

Q & A

04

CORE VALUES

HONESTY

Open and
forthright, even
when difficult

SAFETY

**Prioritizing
safety above all
other
considerations**



UNITY

Mutual respect
and willingness to
collaborate

QUALITY

Commitment to
excellence

PROBLEM STATEMENT

Incidents that occur onsite impact, productivity, cost the company money, and ultimately jeopardize employee well-being. The purpose of this project is to identify impactful factors that reasonably decrease incident rates.



PROPOSED SOLUTION - Executive Dashboard for Analysis and Monitoring of Safety Trends

KPIs

- Safety Incident Rate
 - $\text{Sum of LTA, REC, \& RECR incidents} * 200,000 / \text{Total Hours Worked}$
- Lost Time Accident Rate
 - $\text{LTA Type Incidents} * 200,000 / \text{Total hours worked}$
- Daily and Weekly Checklist Engagement Rate
 - $\text{Count of Daily and Weekly Engagement} / \text{Days or Weeks Worked}$

Interactive Tables and Graphs

- Relevant Data
- Filters to Focus on Specific Variable
- Drills for Increased Granularity

*Safety Incident and Lost Time Accident Rates Calculated at Individual and Aggregate Levels

CHALLENGES

- Adapting to Unfamiliar Software and Datasets
- Data Cleaning
 - Joining Tables
 - Missing Data
 - Imputation/Dropping Columns
- Data Feature Engineering
 - Calculated Fields
 - Streamlined Categories
- Analysis
 - Exploration of Actionable Trends



DASHBOARD DEMO

CONCLUSION

Since the data was not drawn from an experiment, we cannot establish causation at this time. However, the findings suggest relationships are present.

Based on the analysis, accidents are an inherent risk in the construction environment. Engagement with the checklist policies overtime has shown a reduction in the incident rate.

Are there any
questions?

THANKS FOR
LISTENING!

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