

CONSISTENTLY DELIVERING

## AVA at Jenkins

24 April 2024



# Agenda

- Background
- How to Leverage Data to Create Value
- Challenges
- Results

# Who are we...

- Afrimat is a leading mid-tier mining and materials company
- Listed on the JSE in 2006 – Listed under Basic materials: General Mining
- Diversified portfolio through various acquisitions – Most recent Acquisitions: Lafarge South Africa
- Currently operating from 73 sites countrywide

## **Our Mission**

To be globally respected for excellence in unlocking and enhancing the earth's mineral potential to build a better world



**CONSISTENTLY DELIVERING**



# Jenkins

- 8 ADTs
- 3 Excavators
- Moving 400 to 450 Thousand tons per month

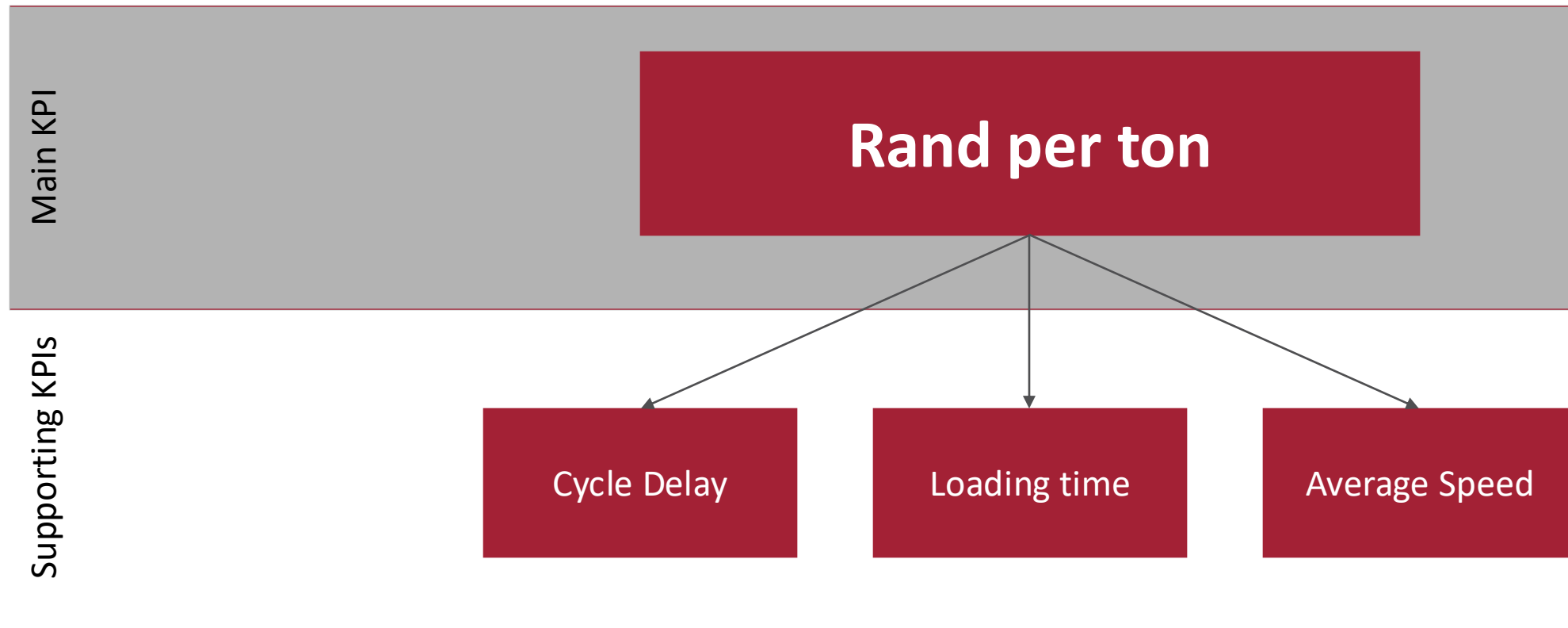


# Agenda

- Background
- **How to Leverage Data to Create Value**
- Challenges
- Results

# How to Leverage Data to Create Value

## Start by focussing on correct KPIs





# How to Leverage Data to Create Value

## Improve the KPIs

### Loading time

- “Shotgun Loading”
- “Meet at the loader”
- Load according efficiency best practices



# How to Leverage Data to Create Value

## Improve the KPIs

### Average speed

- Haul Roads “Straight and Sexy”
- Loading and dumping areas graded at all times





# How to Leverage Data to Create Value

## Improve the KPIs

### Cycle Delay

- Focus on all non-Value added standing time
- Add Portable toilets to all cycles
- Ensure all Stop Streets are necessary – replace with Yield signs if possible



# How to Leverage Data to Create Value

## Use Data to Monitor Improvement and Ensure Long Term results

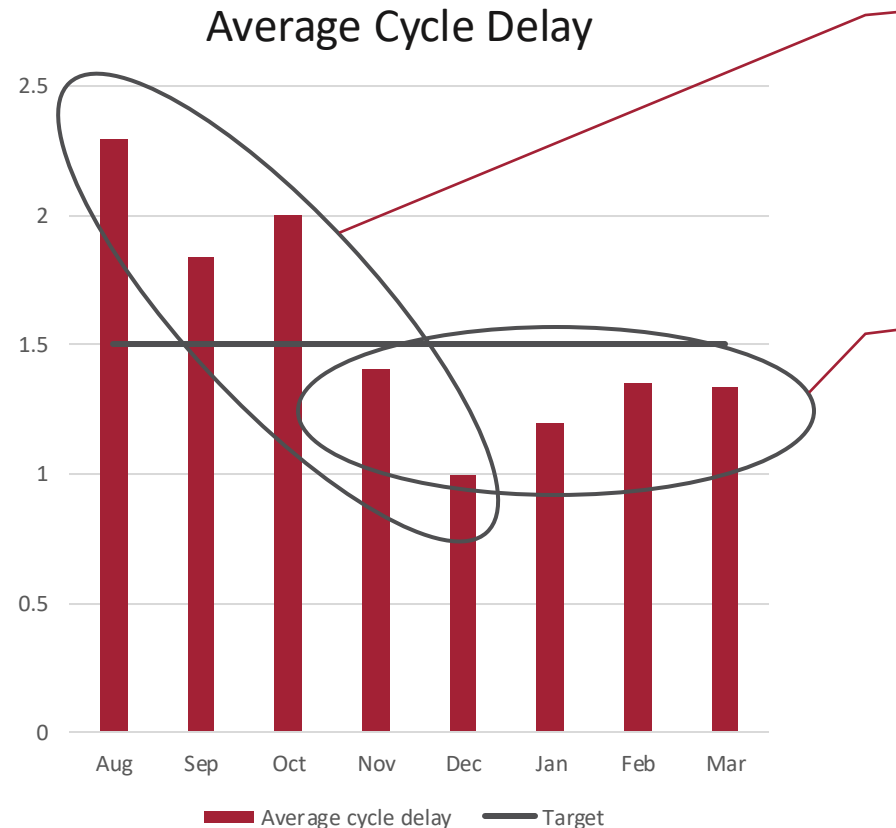
- Use AVA data to select area with most potential for improvement
  - AVA analysis very helpful in focussing efforts
- Focus on no more than 3 KPIs at a time – monitor all other KPIs



# How to Leverage Data to Create Value

## Use Data to Monitor Improvement and Ensure Long Term results

- Monitor improvement by checking hourly/daily/weekly/monthly
- Once target is achieved use data to ensure KPI does not “drift”



Monitor Improvement

Ensure Improvement isn't lost over time



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# Challenges

- **Engine hour accuracy**
  - Engine hours currently not accurate
    - Devices rewired to alternator
    - Settings changes on hardware and software
    - Accuracy between 90% and 50%
- **Loading equipment KPIs**
  - Bad cell phone signal in pit means no communication with excavators – Other hardware under consideration
  - Front End Loader KPIs still under development
- **Booking of equipment**
  - Unable to book equipment as delayed or down
    - Under development



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- Background
- Project approach
- Challenges
- **Results**

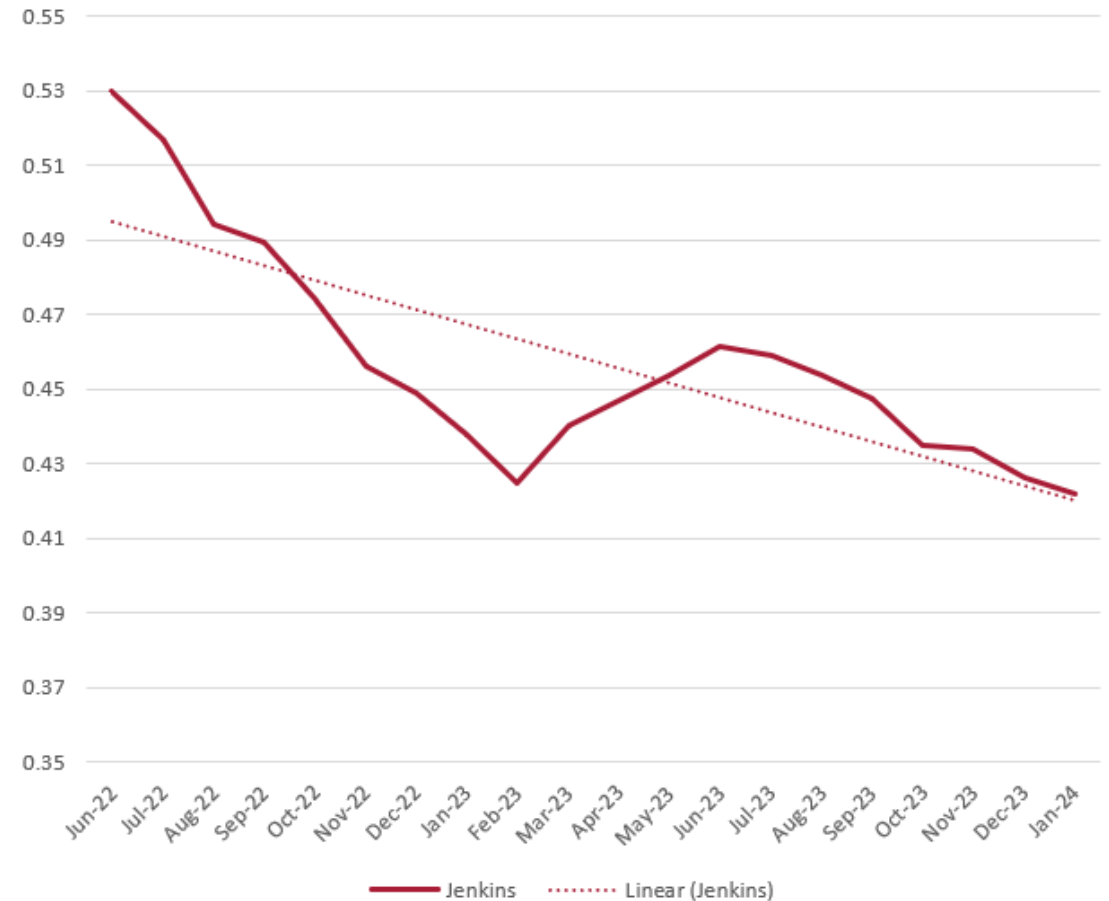


# Iron Ore Mines

## Liter per ton mined

- **Jenkins** has successfully reduced its diesel consumption per ton mined from a baseline average of 0.66 liters per ton to 0.42 liters per ton
  - Baseline selected as mid 2021
- During FY24 Jenkins saved **691 729 litter year on year**
- **Jenkins** - Total saving of **3 067 955 litters Diesel** since Efficiency drive started in 2021
- Moved from **13 ADTs to 7 ADTs** without losing tons

Liter per Ton Mined  
(12 Month Average)



**THANK YOU**

**CONSISTENTLY DELIVERING**

