

Fig 5-1 OAE Definition

Overall Asset Effectiveness = Efficiency x Utilisation

$$\frac{\text{no of good units produced}}{\text{max validated rate/hr x hrs available}} = \frac{\text{no of good units produced}}{\text{max validated rate/hr x running time (hrs)}} \times \frac{\text{running time (hrs)}}{\text{hours available}}$$

hours available

What's In

- Production Schedule based on scheduled shift pattern
 - Overtime
 - All Meetings
 - All Training
 - Meals / Breaks
 - Showers
- Unscheduled Stoppages due to:
 - Labour - Materials
 - Breakdowns – Utility
 - Deviation – Logistics
 - Any Other Incident
- Scheduled Stoppages due to:
 - Set Up – Cleaning
 - Changeovers
 - Maintenance
 - Validation
 - Everything else not covered by What's Out

What's Out

- Off shifts based on scheduled shift pattern
 - Holiday
- Annual shutdown

Fig 5-3 Time Account Model

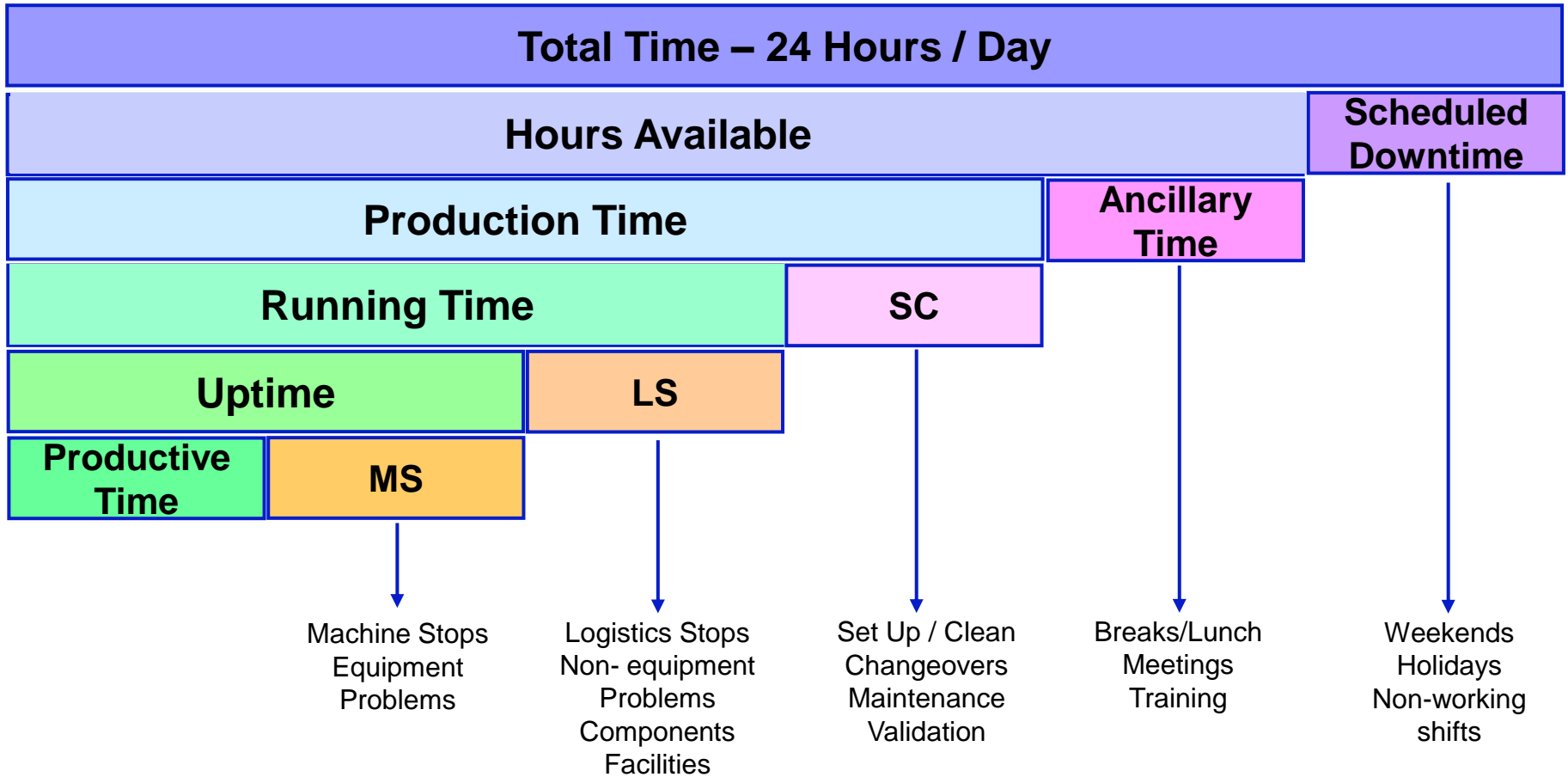


Fig 5-4 Visualisation Proposal 1

Excellence ThROO – Packaging OAE

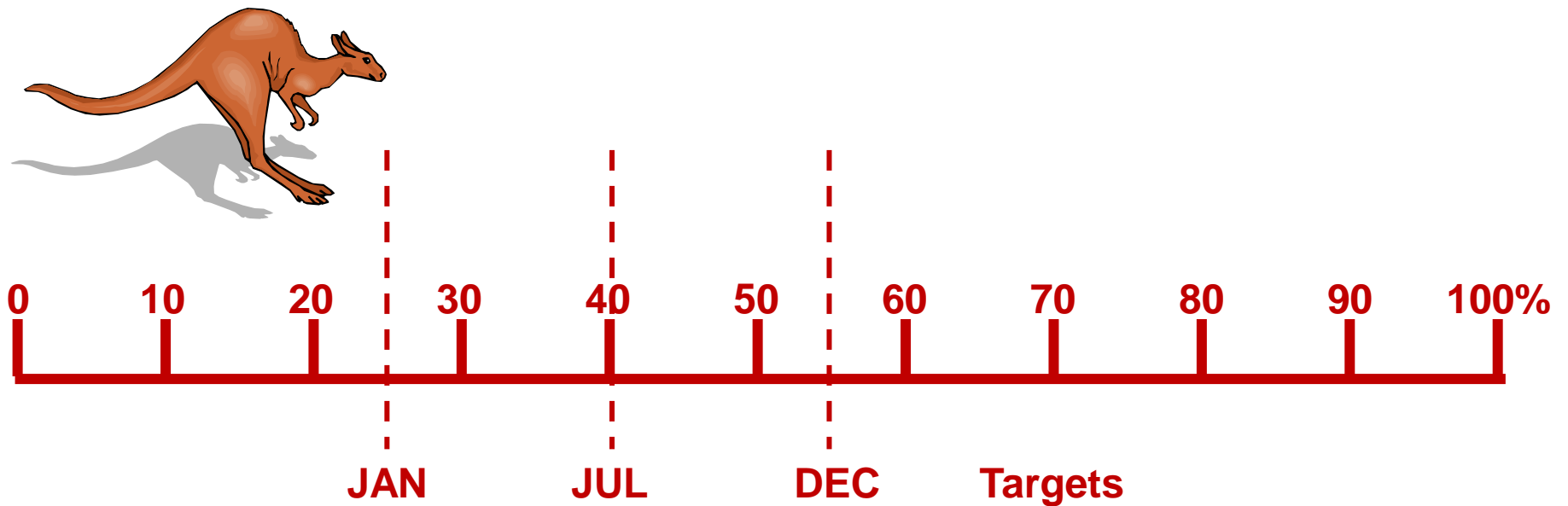


Fig 5-5 Visualisation Proposal 2

Excellence ThROO – Tableting OAE

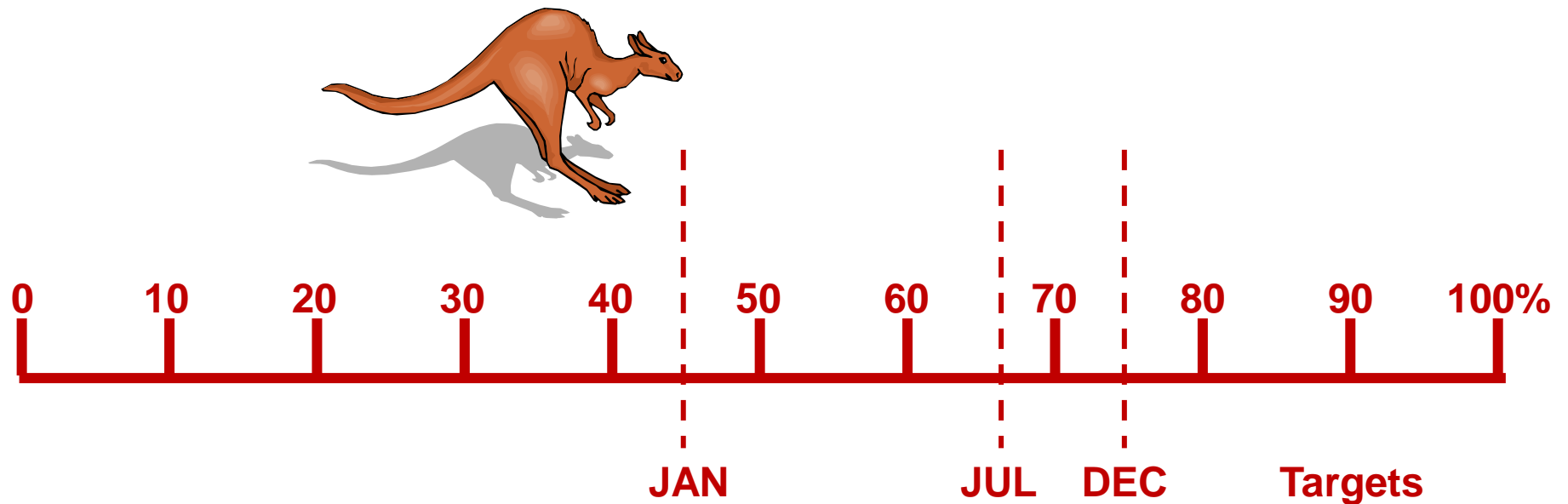


Fig 5-6 Milestone 2. KPIs – Briefing Document

SCOPE: To calculate and report the 'Elite' KPIs for pilot project

KEY CHANGE ISSUES:

- Gather, analyse and report data as automatically as possible
- Present KPIs structurally and visually
- Update daily as required
- Apply KPIs also to QA/QC

CRITERIA FOR SUCCESS:

- KPIs are clearly stated, accurate and presented for two weeks

Fig 5-7 Milestone 2. KPIs – Activity Plan

