AUSTRALIAN DIE CASTING ASSOCIATION

Visi-Trak®
SENSE, MONITOR, CONTROL

MY SURVIVAL DEPENDS ON IT

My survival depends on it

- **We need higher margins to survive and prosper**
- **Those margins won't come from…**
  - metal cost going down
  - or customer paying us more
  - Or declining utilities costs
- As they squeeze **we need to create a more profitable operation** and that can be achieved **with efficient implementation of plant wide process monitoring & control**

~~Shots per hour~~ → Shippable shots per hour

- **The hidden costs are:**
  - Set-up time
  - Maintenance downtime / tool wear
  - Bad shots
  - Secondary machining and scrap

Overall equipment effectiveness

- **OEE = Availability x Performance x Quality**
  - **Availability** - percentage of scheduled time that the machine is available to operate.
    - Ex. Uptime – Degraded by slow set-up, maintenance from flash and tool wear
  - **Performance** - represents the actual speed of the equipment as a percentage of its designed speed.
    - Ex. parts/hour – pure shots/hour
  - **Quality** - represents the Good Units/Total Units Started.
    - Ex. Scrap Rate – Only the good parts

Overall Equipment Effectiveness

- 70% Availability x 80% Performance x 90% Quality = **50% OEE**
- You are **wasting 50%** of the machine's potential value.
- Over the 10 year life of a $5M dollar system **you've wasted $2.5M**
- **That's $20,667/month in lost value**
- Just a **5% increase in OEE** means a **four month ROI** on a fully automated monitoring system

Toro increased OEE by more than 15%

When you include staff, metal loss, tool wear, and energy cost even a total rebuild turns a quick ROI