


# Climate Change Adaptation through change in grape intake logistics


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## This Guy

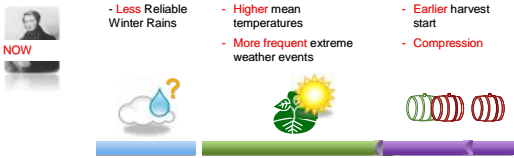


Christopher Penfold  
1811 – 1870



What would winemaking have been like?



### His Years




- Less Reliable Winter Rains
- Higher mean temperatures
- Earlier harvest start
- More frequent extreme weather events
- Compression

### What does vintage compression mean for us?

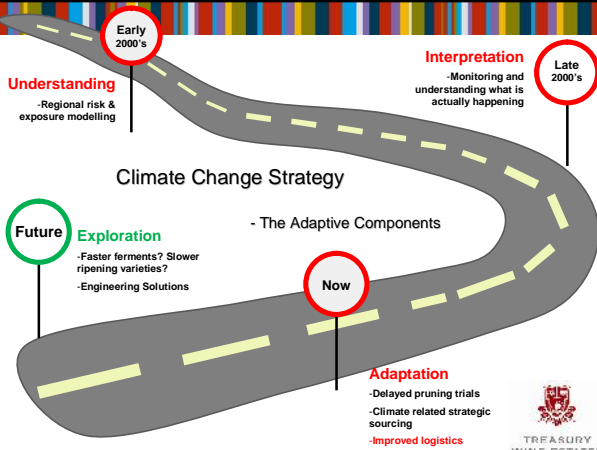
- Pressure on infrastructure
- Impacts on resources
- Challenges around managing quality

Understanding what we can do about this is a journey.....




### Climate Change Strategy

- The Adaptive Components



- Understanding** (Early 2000's)
  - Regional risk & exposure modelling
- Future Exploration**
  - Faster ferments? Slower ripening varieties?
  - Engineering Solutions
- Now**
- Adaptation**
  - Delayed pruning trials
  - Climate related strategic sourcing
  - Improved logistics
- Interpretation** (Late 2000's)
  - Monitoring and understanding what is actually happening



So.....Improved logistics



## The issues with Fruit Intake



- We invest a heap of energy in our schedule
- We achieve about 50% conformance
- Early trucks, late trucks
- Unsure how much is on the truck until it arrives
- Change is ok, as long as we know about it

## Not knowing means that...



- Pressure on people
  - Last minute winemaking decisions
  - Frantic activity, then waiting
  - Associated labour costs

So what are we doing about it?

**No one solution!**

- Scheduling
- Behaviours
- Technology

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## The Vision

Turn this.....



Into this.....



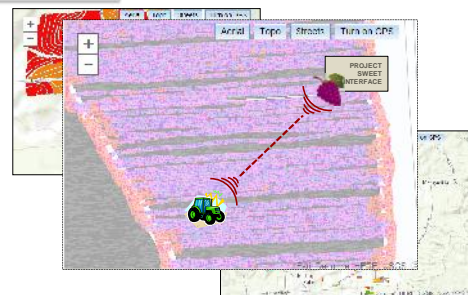
### Across the supply chain

- Web based GIS enabled platform
- Allows stakeholder interaction
- A single point of real time truth!





### In the vineyards

- Spatial interface
- GPS tracking of harvesters



**In the vineyards**

- Enhanced intake reporting options


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**For the carriers**

- GPS tracking through the App







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**For the winery**

- Arrivals and Departures!
- Notifications

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**For the winery**

- 'Heads up'

...rather than realising they are in the driveway

Winery hearing about loads at the vineyard



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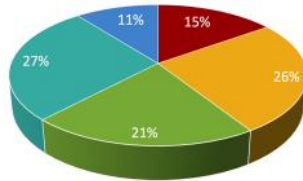
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**For the winery**

- 'Heads up'

Nature of 'Heads Up' provided by Project Sweet

% of captured intake



Time Interval	% of captured intake
< 15 minutes	15%
15 - 30 minutes	26%
30 - 60 minutes	21%
60 - 90 minutes	27%
90 + minutes	11%

211 hours of time we could use wisely

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**Where We're at**

- Continuing to develop the tool
- Already we've shown the importance of embracing new technology
- One part of our climate change strategy, it will (and has to) evolve

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## Acknowledgements

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