



**SA Citrus Board**  
South Australian  
Citrus Industry Development Board



Citrus Growers of South  
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Riverland  
Futures  
Taskforce

**Citrus**   
Australia



Know-how for Horticulture™



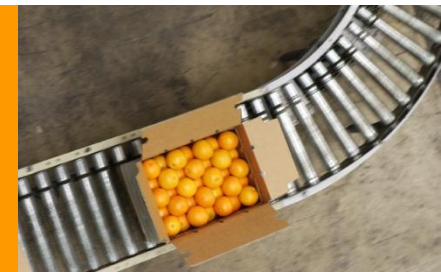
**Government  
of South Australia**  
Primary Industries  
and Resources SA

# Riverland Citrus Industry Value Chain Analysis: An analysis of a two navel orange supply chains

## Leading citrus value chain improvements and branding

Casey Work and Ben Hebart

*Primary Industries and Regions SA*





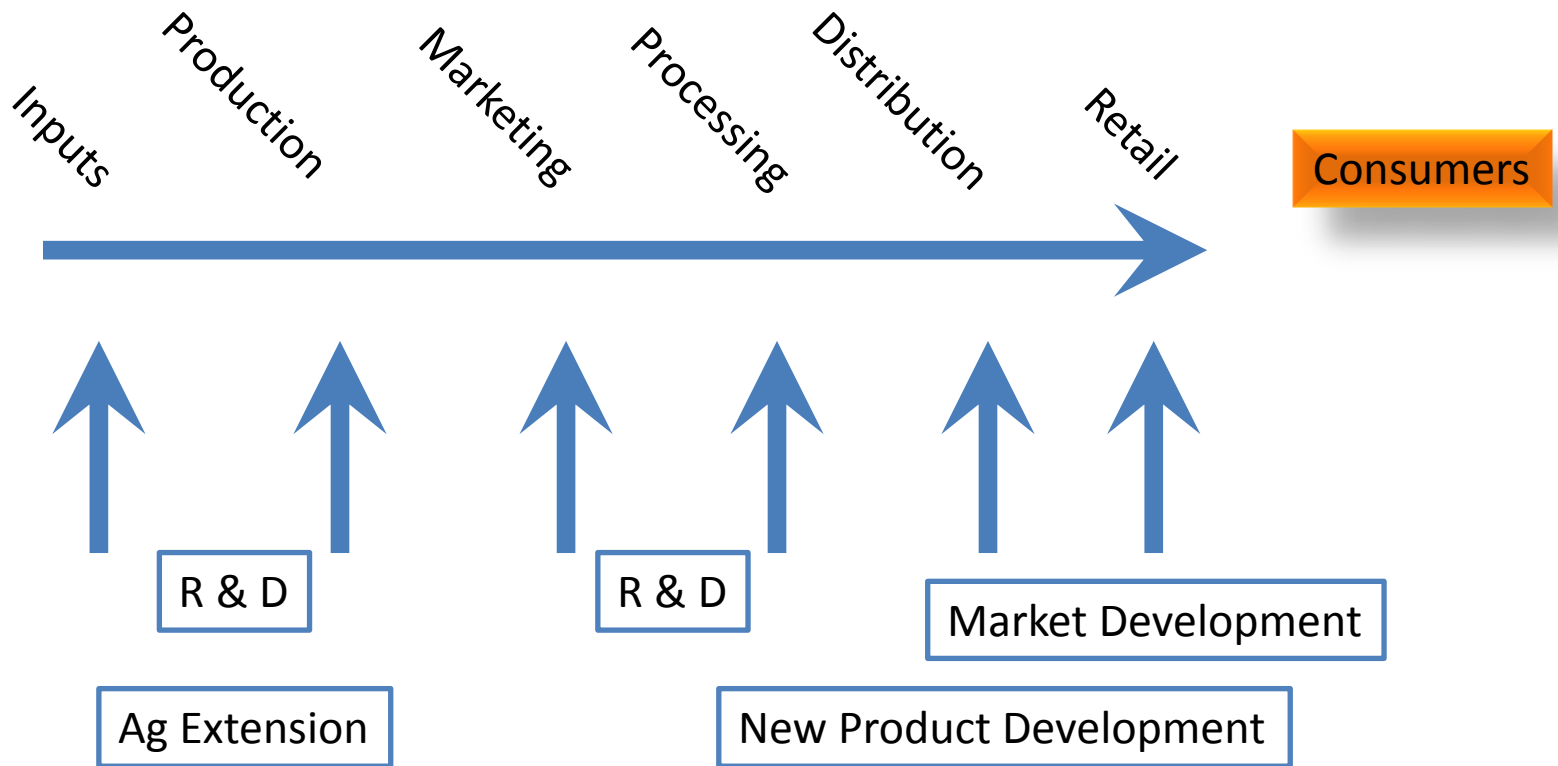
# **Riverland Citrus Industry Value Chain Analysis:**

## An analysis of two navel orange supply chains

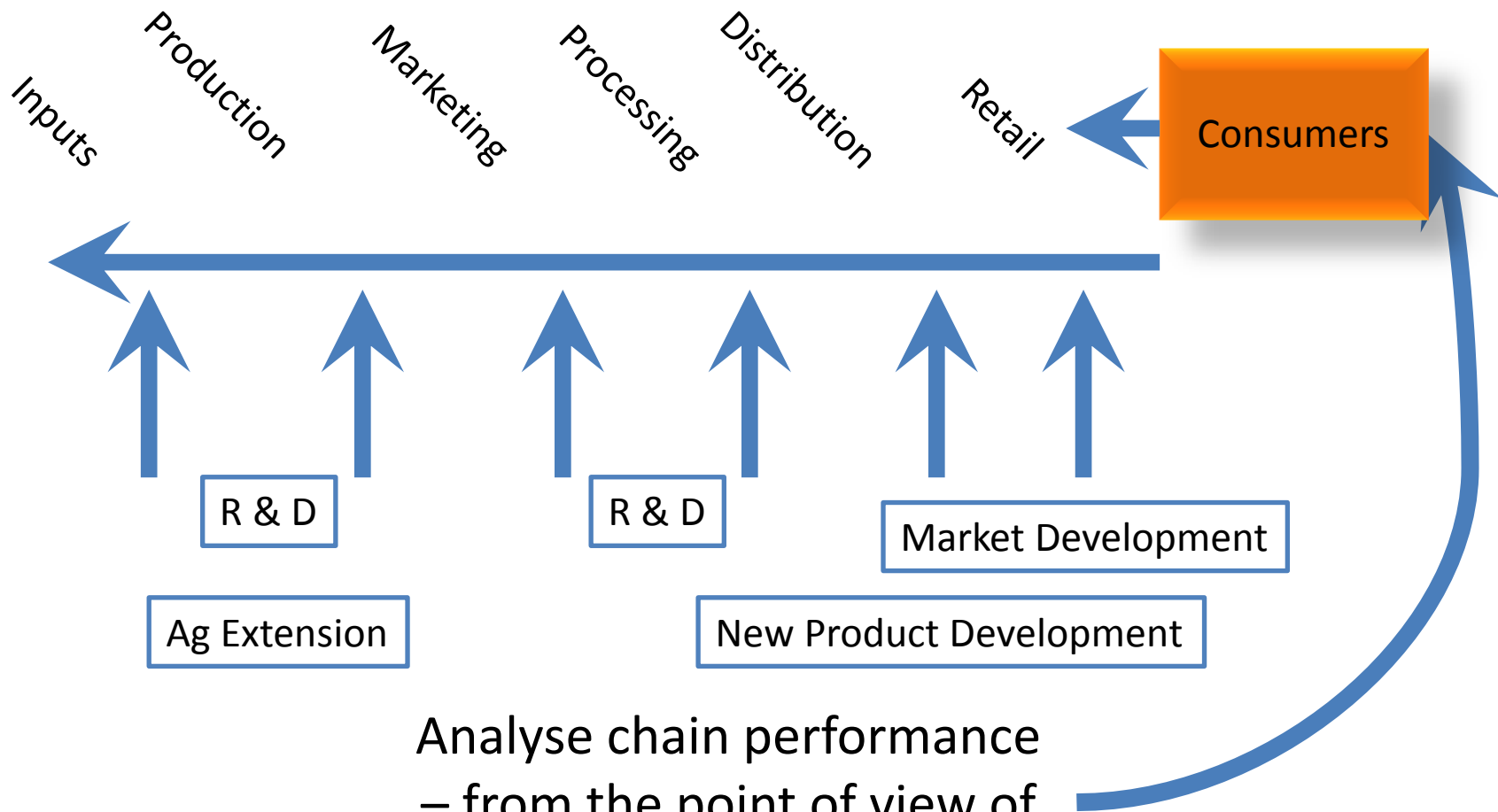
Undertaken to:

- better understand consumer preferences, attitudes and purchasing behaviour
- identify opportunities to sustainably increase the profitability of businesses along the supply chain.

# Supply Chain Thinking



# 'Value' Chain Thinking



Analyse chain performance  
– from the point of view of  
consumer 'value'



**Competing  
for your  
slice.**

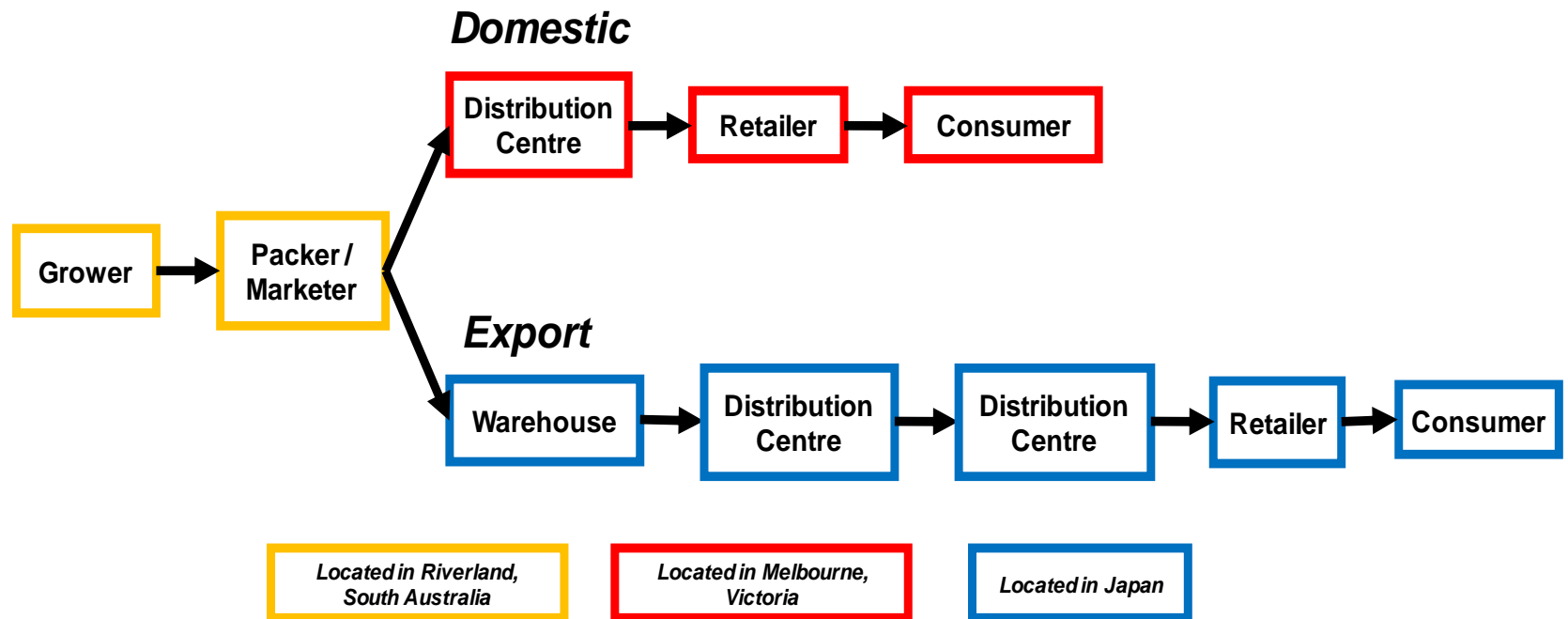


**Working together for a bigger pie.**

# What is a Value Chain Analysis?

- Diagnostic tool
- Analyses material flow, information flow, relationships, and use of consumer insight
- Data in these areas were collected through; walking the chain, interviews, consumer research, lifecycle assessment
- Outcome = ID of improvement projects

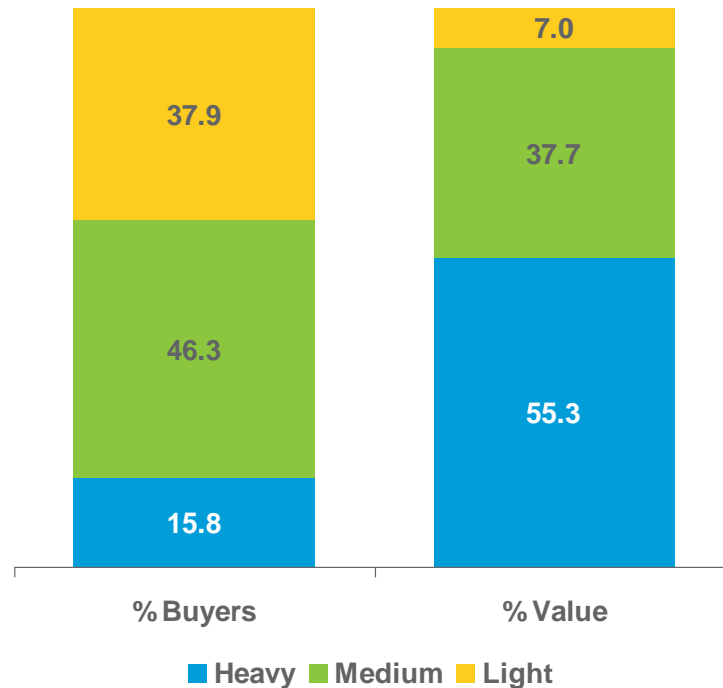
The two chains studied were...



# Consumer Research

## *Domestic Market - Melbourne*

### Consumer Segments



Heavy orange buyers = purchase 12+ times per year  
Medium orange buyers = purchase 3-11 times per year  
Light orange buyers = purchase 1-2 times per year

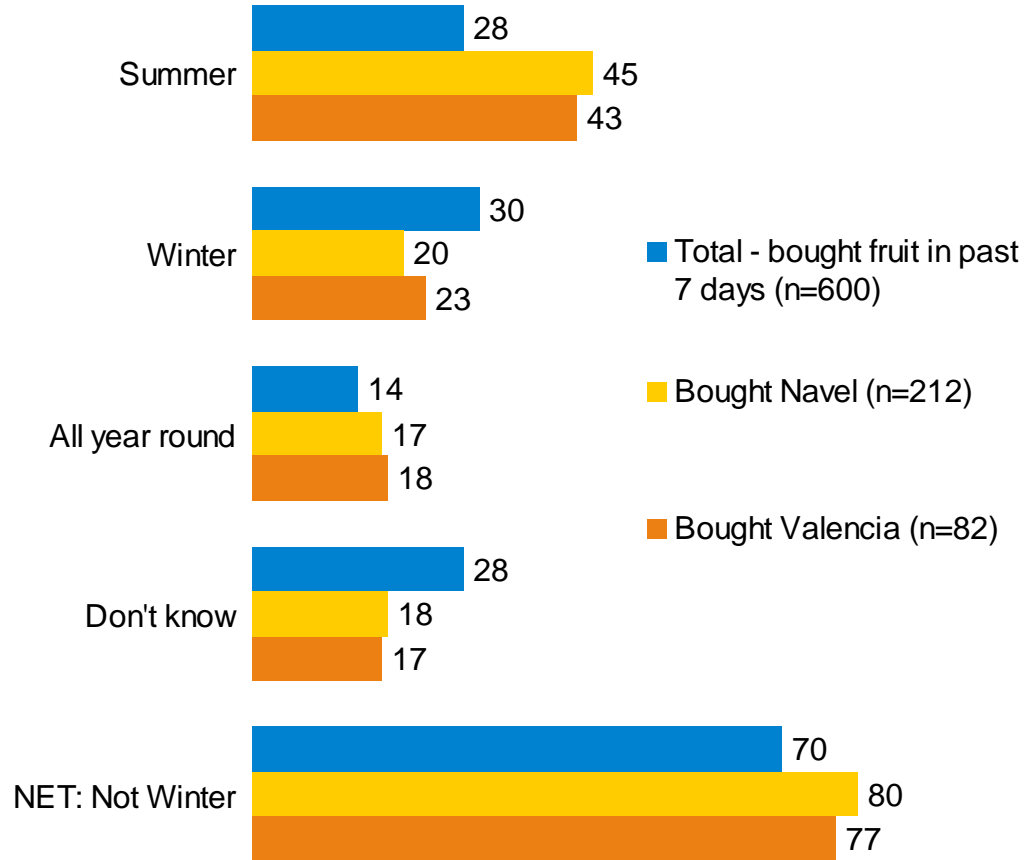


## 'An orange is an orange' ...

*“With apples I can tell a Fuji from a Red delicious and I have an expectation of how they are different”*

*“With potatoes they even tell you on some of the packs now that certain types are better for boiling or mashing and others are better for roasting.... I don't know if some oranges are better for juicing or eating”*

# When are the best tasting oranges in season?





**Fresh**

**Juicy**

**Sweet**

**Healthy**

**Vitamin C**

**High in fibre**

**Sporty**

**Stay fresh for longer**



**Messy**

**Difficult to eat**

**Lack excitement**

**Sensible and reliable  
rather than fun and  
different**

# Consumer Research

## Melbourne Market

Price relative to other fruit

Indicators of quality/ freshness:

- Firmness
- Colour
- Smell
- Skin thickness & shininess
- Seasonality

Pack type

Taste

Health benefits

Shelf life

# Consumer Research

## *Export Market – Tokyo, Japan*

Tokyo consumers give priority to seasonal fruit...

*'In supermarkets they display the in-season fruits at the front. I don't go to the back of the store just to pick up one or two pieces of fruit. When I see stacks of oranges, that's when I think they must be in season.'*

*'I buy fruit based on seasonality and mood. Purchase is random. I don't have a set list.'*

A vertical strip on the left side of the slide shows several slices of oranges, showing the bright orange flesh and white pith.

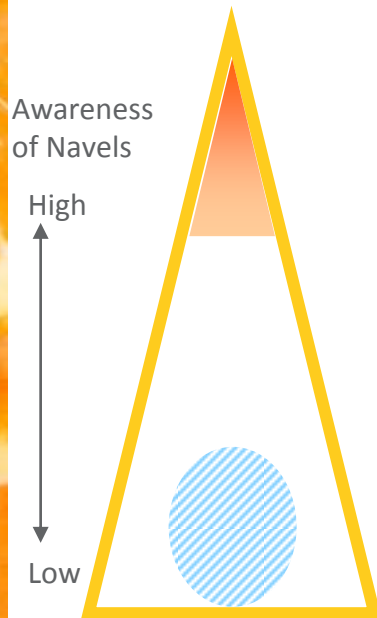
## Differentiation between varieties is muddled...

*'I buy oranges without thinking about whether they are navels or what variety they are.'*

*'I just take the ones off the stack on display. I don't know if they are valencias or navels. I don't look at what type they are.'*

*'I just think of them as selling oranges. I don't buy oranges because they are valencias or navels. There tend to be more valencias, so I end up buying valencias.'*

# Consumer segments



## Navel Orange Loyal Users

- Perceived unique benefits in Navel oranges, and actively preferred to purchase Navel oranges if they were available in-store.

## Orange Users (Majority)

- Made only hazy differentiation between Valencias and Navels.
- Tended to purchase Valencias more frequently than Navels, but basically did not differentiate between orange varieties at time of purchase.

## Navel Orange Non-users

- Had no stock-standard supply of fruit; sought variation.

### Type A

Keep oranges as part of stock-standard supply of fruit at home, and go to store intending to purchase oranges.

### Type B

Give priority to seasonal fruit. If they happen to notice oranges in-store they might purchase them to bolster their supply of seasonal fruit.

# Consumer Research

Melbourne Market	Tokyo, Japan Market
Price relative to other fruit	Seasonality
Indicators of quality/ freshness:	Taste
<ul style="list-style-type: none"><li>• Firmness</li></ul>	Colour
<ul style="list-style-type: none"><li>• Colour</li></ul>	Freshness
<ul style="list-style-type: none"><li>• Smell</li></ul>	Quality
<ul style="list-style-type: none"><li>• Skin thickness &amp; shininess</li></ul>	Thin smooth outer skin, easy to peel
<ul style="list-style-type: none"><li>• Seasonality</li></ul>	Price
Pack type	No pips/seeds
Taste	Shelf life
Health benefits	Size
Shelf life	

# Findings

- Currently both chains use a 'supply push' approach
- Differing objectives throughout the chain
- Fruit graded for size, colour and blemish rather than eating quality
- Navels have little prominence or differentiation at a retail level
- Need to better understand consumers

# Improvement Projects

1. Futuristic scenario planning
2. Seasonal map linked to sensory descriptions
3. Invest in further LCA research
4. Improve point of sale communication
5. Investigate more efficient ways of grading for eating quality
6. Review business models that demonstrate value chain principles
7. Economic Analysis
8. Provide consumer research to domestic industry marketing campaign
9. Improving management of stock systems and fruit handling
10. Foster a value chain culture
11. Innovative product development

# Summary

- The change from 'supply push' to market driven requires a **culture change** in the citrus industry.
- Attributes valued by the consumer can be used to **drive activities** of the chain.
- There is a lot of opportunity to **get closer to the consumer.**



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