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Supply chain innovations for better beef
Jonathan Birnie, Dunbia



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- **Europe's largest Lamb processor**
- Processing **2,000,000** lambs per year

#1



- **The UK's second largest Beef processor**
- Processing **400,000** cattle per year



Strategic Site Locations



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Customers:
Meeting their needs

The Consumer



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- We must supply what the customer wants
- Consumers buying on
 - Value/Price
 - Taste and quality
 - Consistency
 - Convenience
- We must look at our industry through the eyes of the consumer



Customer Expectations



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- Reliable supply
- Consistent quality food
- Total integrity
- Good story
- Competitive price
- Service is the sum of many small details



The Consumer Experience



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- More than 75% of consumers have experienced tough beef

‘you never know what you’re going to get’

- Reputational damage
- Reduced sales
- We must guarantee quality



Our Customers



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Sainsbury's

ASDA

Iceland



**co
op**

TESCO

MARR

ICA



Budgens

SPAR



Carrefour

BOOTH'S

MONOPRIX



**Weddel
Swift**

CONAD

JUMBO
supermarkten

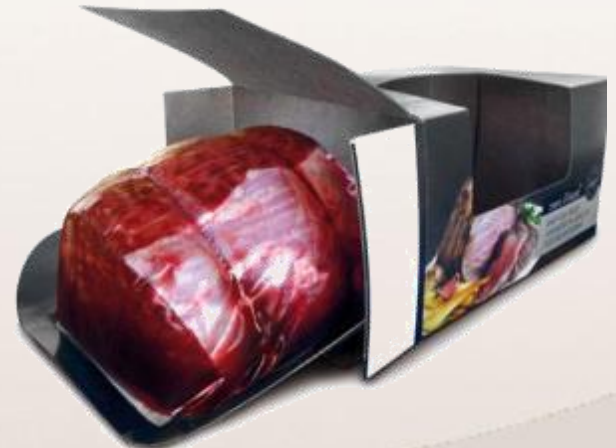


Our Products



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Packaging



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Variation:
A huge problem

Over-fat stock



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4L carcass
waste 3.00kg



3L carcass
waste 1.50kg



2 carcass
waste 700g



5



4



3



2



Variation in striploins



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390kg U+3=



320kg O+3=



440kg U+3=

Variation in the supply chain is large



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- Fragmented supply base
 - Many breeds
 - Calf producers separated from market
 - Lack of price signals back to primary producers
- Variation in management
 - Different diets, ages, housing, mixing
- Payment systems flawed
 - Encourage breeding for yield only
 - Don't encourage yield in the right areas
 - Don't incentivise eating quality



Feedback is essential



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- Measurement of eating quality is absent
- Without feedback, improvement is minimal
- Without measurement, feedback is impossible
- Variation remains high
- Much factory variation has been removed, animal variation is becoming progressively more important
- How to measure the quality of red meat?
- How to use technology to improve?





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Innovation:
The only solution

What would be useful



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- Simple data recording (on farm)
 - Measure effect of change
- Management systems
 - Fast growth
 - Reduced disease
- Nutrition
 - Eating quality
 - Nutritional content
- Measurement systems (in factory)
 - Tenderness
 - Nutritional content
 - Flavour
- Payment systems
 - Accurate reflection of value
 - Financial incentive towards change
- Genetics
 - Method of prediction before breeding takes place
 - Shape, yield, quality



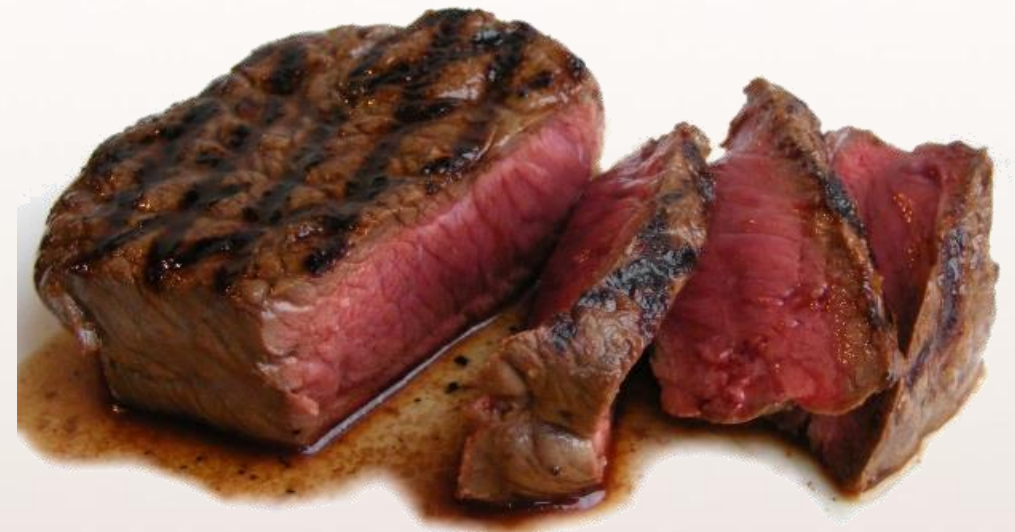
Examples



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- Use of mobile phones to collect data on-farm
- On-farm automatic weighing
- Automatic/portable feed analysis
- Use of imaging technology to grade livestock
- Online measurement of quality
- Variable/targeted stimulation of carcasses
- Different packaging technology to improve life
- Different tray technology for in-pack cooking
- Meat tenderisation using knife technology



Understanding the commercial environment



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- Production process is fast moving
- Lack of time for feedback
- Measurement must be fast
- Measurement must be accurate
- Processing interventions to improve are possible
- They must be simple, robust and usable



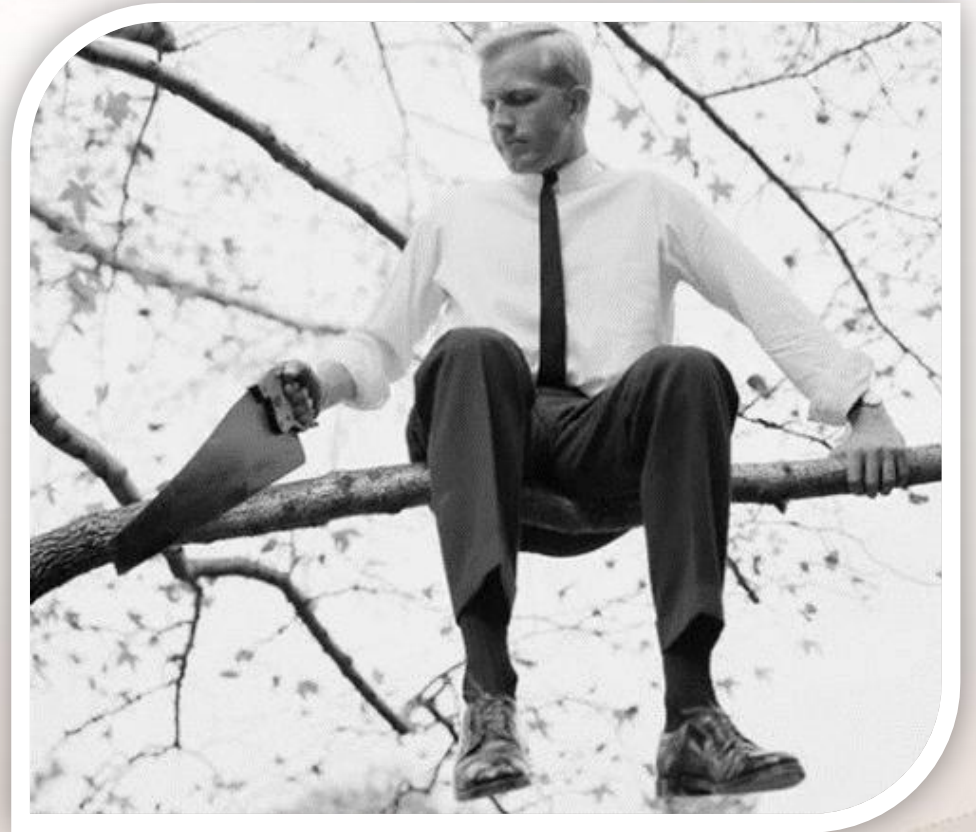
Research must have implementation plan



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- Research must be grounded in addressing practical problems
- Research must be oriented towards commercial application
- Research should only be commissioned with an implementation plan





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**Science can set the standards,
but it can't change behaviour**

(Mark Fisher, Ministry Primary Industries, NZ)



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End