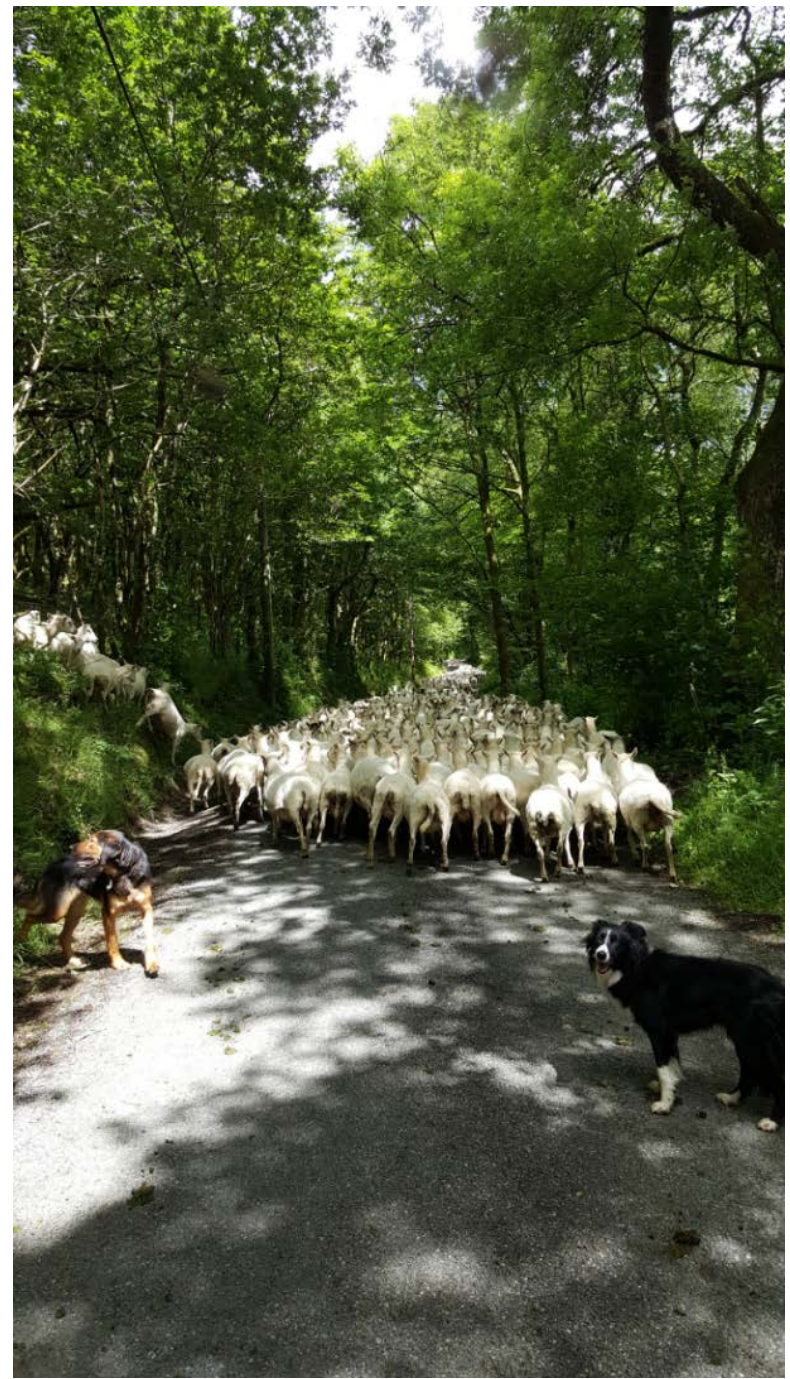


Ease of data collection on farm; myth or reality?

Huw Davies

EAAP 2016

Belfast



My aspirations as a sheep farmer

- Reduce and control lameness
- Increase lambing percentage
- Improve flock longevity
- Develop an easy (easier) care flock
- Improve the milk yield of ewes
- Achieve consistency in lamb finishing weights
- Reducing the days taken from lamb birth to finishing
- Less barren ewes
- The ability to evaluate sire performance
- The ability to undertake flock performance recording

Large numbers



Key tools!



Key tools!



But limited....!

**“You Can't Manage What You
Don't Measure”**

paraphrasing of an original quote by Lord Kelvin. The first to use this paraphrasing was Bill Hewlett, the co-founder of Hewlett Packer.

**“...if I keep no record of what I
do, I can always assume I've
succeeded.”**

-Stephen Colbert

-*10 Key Takeaways From Bill Gates' Annual Letter 2013*



Simple reporting

Animal rule report

Select your columns to display (if none are ticked ALL will be displayed) then set the rules and push button to list animals meeting that rule.

- FB Sex Age Bought Date of Death Foster Ewe Sire Notifications Inturned Eyelids
 NationalID DOB Purchased From Place of Destruction Fqas Name Days Lambing Ease
 Colour Dam Move off Date Culled Reason Siblings Age Vigour Birth Weight
 Breed Date Bought Moved to Location

Year Born: **State:** **Dam Breed:** **Sex:** **Siblings:**

Breed: **NationalID:** **FB:** **Dam:**

Group: **Colour:** **Sire:** **Batch No:** **FB No Range:**

Date of Birth: between/on & **Date Joined :** between/on & Ignore born in herd

Age Mths: between & **Left:** between/on & **Died:** between/on &

Sold/Moved To: **Culled Reason:** **Carcass Disposed:** **Location:**

List animals matching rule

Clear performance summary

Calculate Statistics

Show Preg Diag Breakdown

Show Lambing Stats

Flock Performance

Ewes to Tup:(31/12/2015)	556 (580)	Ewe Mortality			
% Scanning Results:	0 % (0 %)	Month	No/Rate	Month	No/Rate
% Lambing:	168 % (158 %)	1	1/0.18%	1	1/0.17%
% Recorded Lambing Losses(pre tag):	0 % (0 %)	2	1/0.18%	2	0/0.00%
<1 mth losses in Period:	4 % (0 %)	3	4/0.72%	3	2/0.34%
> 1 mth losses in Period:	0 % (1 %)	4	0/0.00%	4	0/0.00%
Lambs born alive:	860 (1240)	5	0/0.00%	5	0/0.00%
Ave 1st Weight:	30.0 Kg (31.0 Kg)	6	0/0.00%	6	1/0.17%
Sales in Period:	52 lambs 129 other	7	0/0.00%	7	1/0.17%
Deaths in Period:	45 lambs 4 other	8	0/0.00%	8	1/0.17%
		9	0/0.00%	9	0/0.00%
		10	0/0.00%	10	0/0.00%
		11	0/0.00%	11	0/0.00%
		12	0/0.00%	12	0/0.00%
		Total	6/1.08%	Total	6/1.02%

Carcass Averages

Daily Live Weight Gain:	-1.75(0.13)
Weight at Slaughter:	39.9
Age at Slaughter:	128
Pence per Kilo:	507.16
Grades	Fat Classes
E (%) : 0.00	1 (%) : 2.50
U (%) : 5.00	2 (%) : 32.50
R (%) : 60.00	3 (%) : 0.00
O (%) : 35.00	4L (%) : 0.00
P (%) : 0.00	4H (%) : 0.00
	5 (%) : 0.00
	5L (%) : 0.00
	5H (%) : 0.00
	3L (%) : 60.00
	3H (%) : 5.00

Daily Report: 13/08/2016

Click to show breakdown of animals

Live in Flock(end of day):

2 rams
 372 ram lambs
 591 ewe lambs for sale
 0 ewe lambs to be retained
 410 ewes

“Live” sale data feed

[Printer Friendly Format](#)[Create Excel CSV Format File](#)[Create Excel Tab Sep File](#)[Create PDF](#)

The list below show 40 animals

Ear Tag	FB	Sex	Brd	Sale Date	Sale/Est Price	Sale/Est Weight	Killout %	Dead Weight	Grade/Fat Class	PPK
UK074190706162		Male	PRIMERA	17/07/2016	75.05	45.0	43.3	19.5	R 1	3.85
UK074190706164		Male	PRIMERA	17/07/2016	69.3	40.0	42.5	17.0	O 3L	4.08
UK074190706185		Male	PRIMERA	17/07/2016	71.4	40.0	43.8	17.5	O 3L	4.08
UK074190706194		Male	PRIMERA	17/07/2016	73.5	42.0	42.9	18.0	O 2	4.08
UK074190706195		Male	PRIMERA	17/07/2016	70.12	40.0	42.5	17.0	R 2	4.12
UK074190706198		Male	PRIMERA	17/07/2016	85	47.0	43.6	20.5	R 3L	4.15
UK074190706200		Male	PRIMERA	17/07/2016	69.3	40.0	42.5	17.0	O 3L	4.08
UK074190706210		Male	PRIMERA	17/07/2016	70.12	40.0	42.5	17.0	R 3L	4.12
UK074190706215		Male	HIGHLANDER	17/07/2016	68	40.0	41.3	16.5	R 3L	4.12

Individual animal performance

Performance Manager/EWE ANALYSIS

Sheila Davies

Ewe Performance

Enter a value for retained animals then values in the boxes to filter data, or else leave blank to return all in date range.

100 ▼ recs per page Date Range 01/01/09 ▼ - 31/12/09 ▼ Ear Tag: Retained/Replacement Value: 80

Turnover More Than ▼

Off Spring More Than ▼

Turnover/Head/Month More Than ▼

DLWG More Than ▼

Days to Finish More Than ▼

Kill out% More Than ▼

Lameness Cases: More Than ▼

Only include parents currently on farm

List Animals Meeting Rule

Vet and med detail

Veterinary Centre

Select an entry from the list below. Most recent records are displayed first. To record a treatment against an animal please click the Herd Manager link on the left menu

13/08/2016

Show stock Value

Total Value of stock on 13/08/2016 is: £77.74

	Batch Number	Name	Supplier	Quantity Remaining	Purchase Date
Select This Batch	ZBE008A	Ectofly	W.D. Lewis & Son	20000 mls	05/08/16
Select This Batch	A023AC03	Enzovax	Steffan Vets	360 mls	05/08/16
Select This Batch	P608505	Rycoben	W.D. Lewis & Son	11354 mls	04/07/16
Select This Batch	H220YA05	Heptavac-P plus	W.D. Lewis & Son	104 mls	14/06/16
Select This Batch	H224XA06	Heptavac-P plus	W.D. Lewis & Son	0 mls	14/06/16
Select This Batch	P771267UK	Click	W.D. Lewis & Son	3157 litres	18/05/16
Select This Batch	ZUL011A	Endofluke	W.D. Lewis & Son	2498 mls	04/01/16

ZBE008A

Batch Number:	ZBE008A
Name:	Ectofly
Supplier:	W.D. Lewis & Son
Application Method:	Pour on
Quantity Purchased:	20000 mls
Quantity Remaining:	20000 mls
Milk Withdrawal Period:	192 hours
Meat Withdrawal Period:	8 days
Other Withdrawal Period:	8 days
Purchase Date:	05/08/2016
Expiry Date	30/04/2017
Cost	0

Click on the button below to carry out action on this batch.

Mark as finished

Refresh Batch

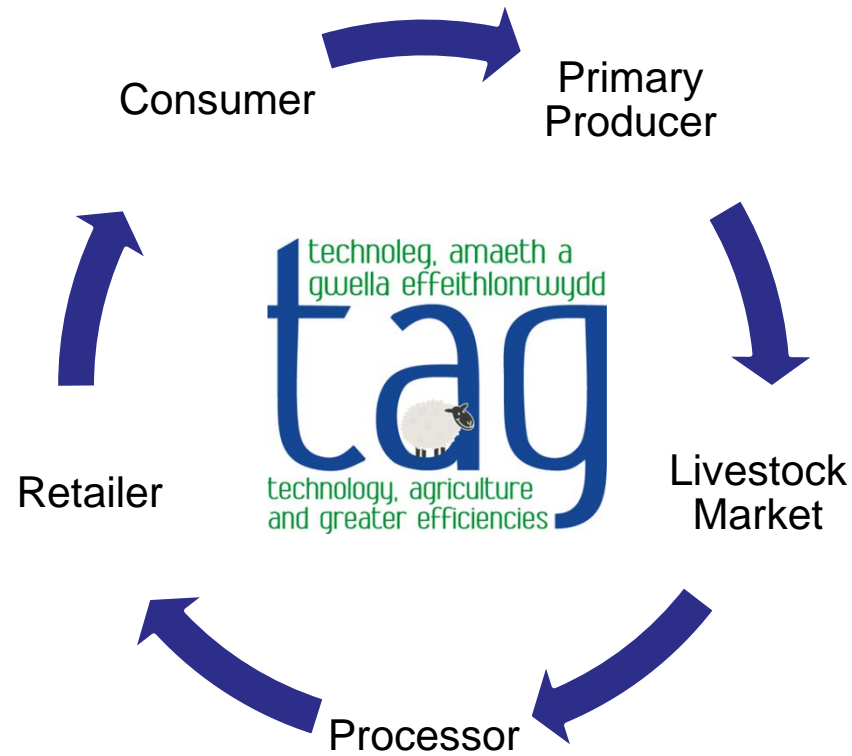
Update Batch

Breed/sex comparison



	Benywaidd • Female	Gwrywaidd • Male
TXL	45.13	44.68
CRL	45.05	44.61
BTX	44.34	45.70
ABERMAX	44.09	43.91

TAG project



Dunbia



FarmWizard

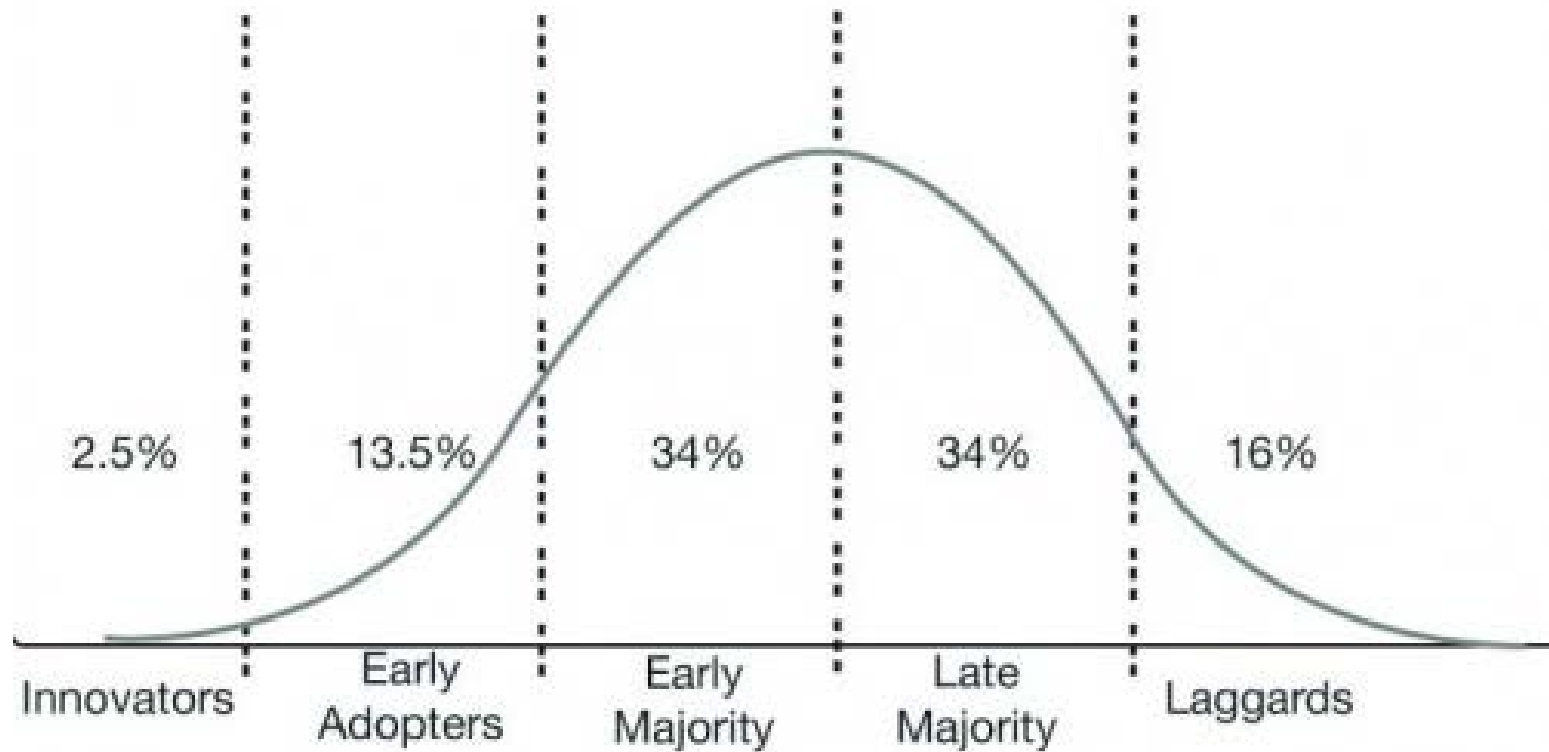
- ✧ Worlds first livestock management SaaS Platform founded in 2004
 - Terry Canning, Founder with farming background- >10 years experience as Software Architect with Blue Chip Tech Companies
 - Unique, multi platform, multi vendor, multi species cloud computing herd recording solution
 - Strong Brand with International network.
- ✧ Extensive international reach both direct & corporate client base
 - 1200 livestock farmers internationally
 - 2.2 million animal records with 4.5 million events
 - Multiple corporate agreements in place with international VARs, Government bodies, Retailors
- ✧ Acquired by Wearsheaf Feb 2015
 - Part of Duke of Westminster's Grosvenor Group
 - Focus on energy/protein production "making more from less"



TAG project outcomes

- There are more farmers involved in using EID to monitor the performance of their sheep than would have occurred otherwise – i.e. SCALE additionality
- That a number of farmers have started recording their sheep/using EID for performance monitoring earlier than they would otherwise – TIME additionality
- That a number of farmers have started improving the quality of their stock as a result of TAG – QUALITY additionality
- **+ Removed a degree of the stigma surrounding sheep EID – Acceptance factor**

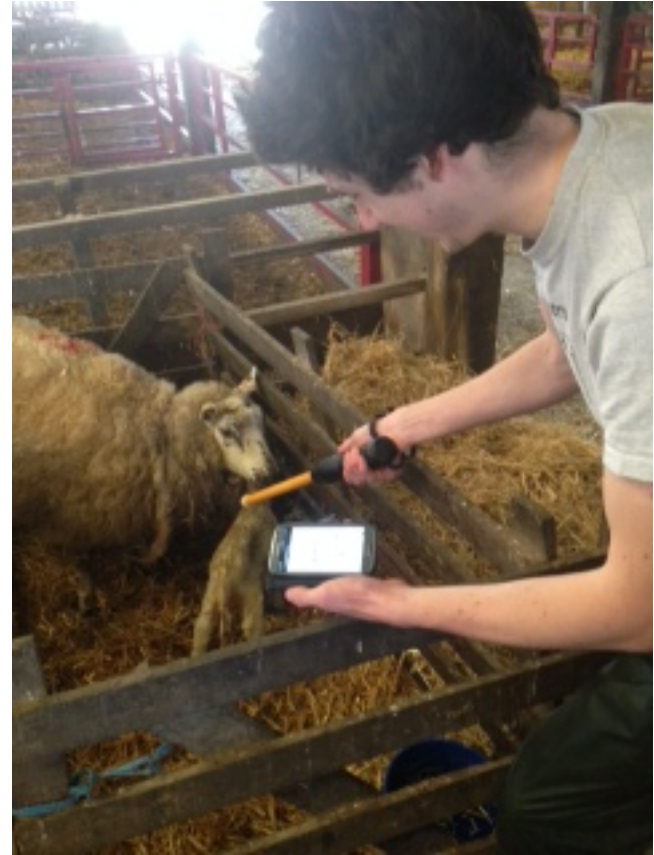
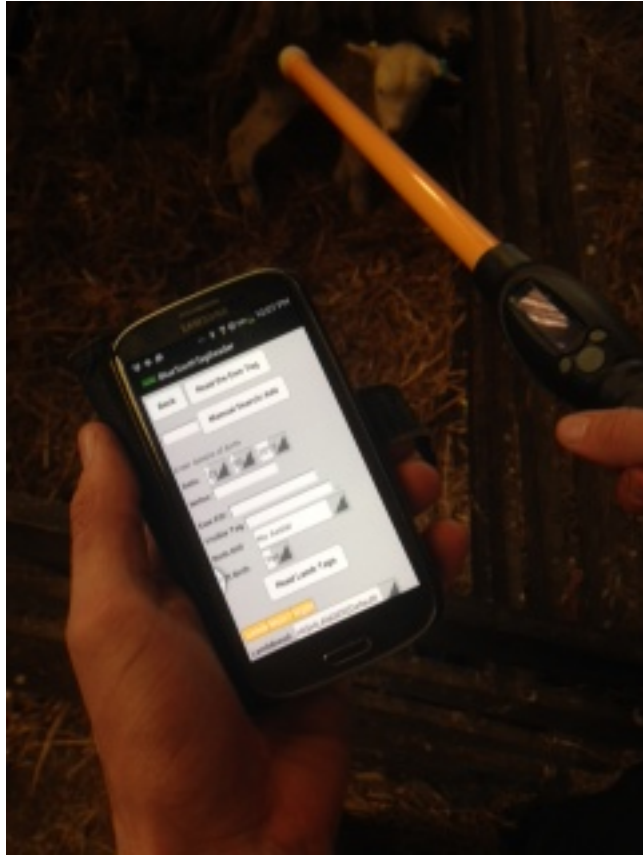
Diffusion of Innovations graph



Sheep farmer frustration



Innovation



Easy touchscreens

Lambing
Foster
Treatment
Mark for Move
Stock Take
Weigh
Death
Sale
Condition Score

Date	
2016-08-13	
Notes :	
Medication 1:	Medication 2:
BN ZUL011A -04/0 ▼	N/A ▼
History: _	Treatment Reason
Administrator	Fly control ▼
Other, enter value > ▼	
Treat Date	Treat Fin
2016-08-13	2016-08-13
Med 1 Quantity/Animal	Med 2 Quantity/Animal
01 ▼	01 ▼
Activity	Quarter
N/A ▼	N/A ▼

Key traceability and health/welfare data

Date
2016-08-13

Notes :

Ewe EID: Visible Tag

Birth Diff: No Assist Aft Birth: Yes

Lamb	Male?	Wght	Lmbing	Ease	Vigt	InTrn	Eyes
------	-------	------	--------	------	------	-------	------

LambBreed: HIGHLANDER(Defa Is Cross? Stillborns: 0

Ram: N/A

Seasonal Lameness advice: Pre Topping

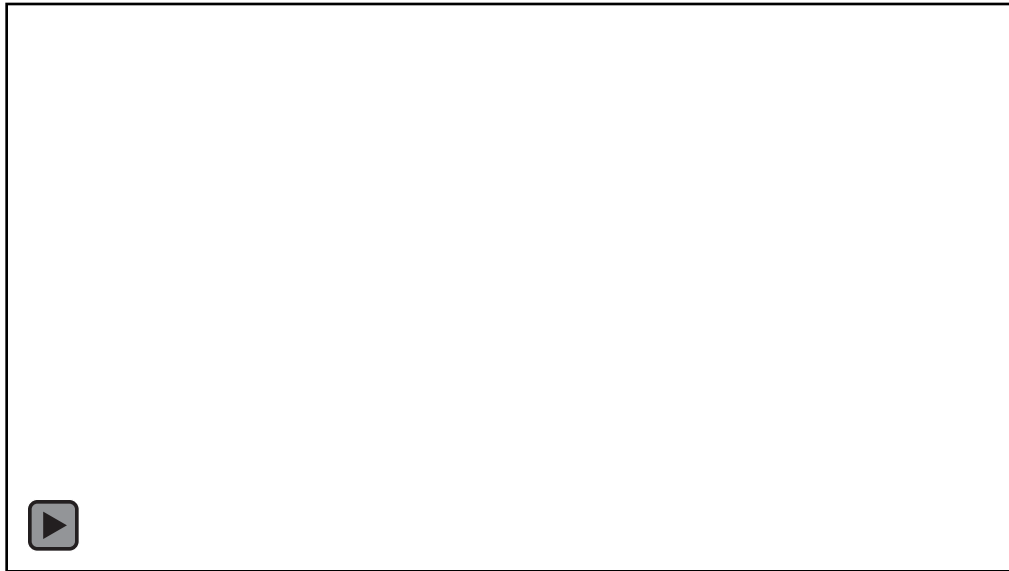
Treat all sheep with footrot and scald with antibiotic inj

Please click Refresh if record may not updated

Mobility Scores 2 or more, This month vs Last :

Castrated Male This : 0% Last : 0%	Ewe This : 0% Last : 0%
Ewe/Lamb This : 0%	Lamb This : 0%





Dog Tapeworm project

- Saleable parts of carcasses are devalued or wasted
 - Livers – fluke, tape worm
 - Meat – abscesses, bruising, contamination
 - Excess fat
 - Skins and hides – clipping, shearing, contamination
- <http://www.menterabusnes.co.uk/tag/control-of-dog-tapeworm-covis>



Ewe nutrition project

The project worked with 6 sheep farmers to deliver key flock measurement data that linked ewe nutrition with lamb growth rate.



Genomics project

The project investigated the use of genetic markers for improved carcass characteristics and meat quality to facilitate faster genetic gain within the Welsh sheep industry.

Carcase characteristics include:

- loin length / weight
- Yield of saleable meat
- Tenderness
- Grade (Fat and Conformation)



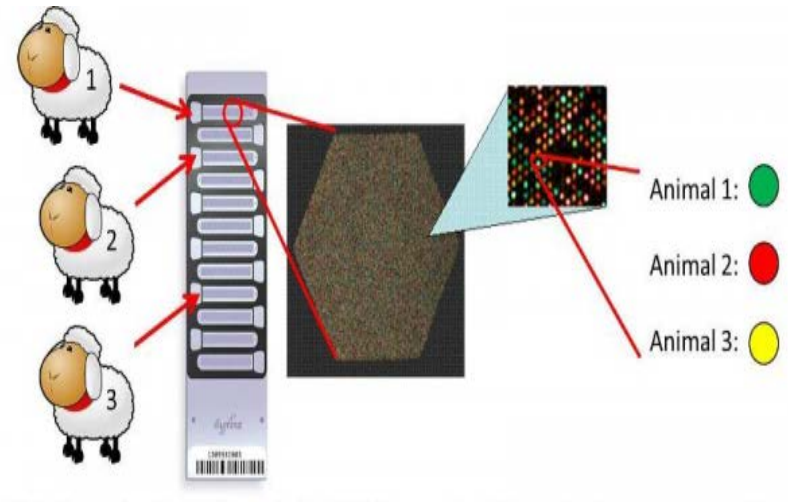
B

A

Genomic Technology

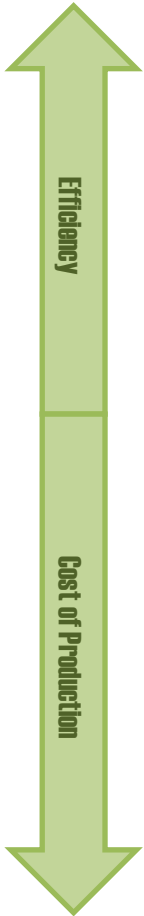
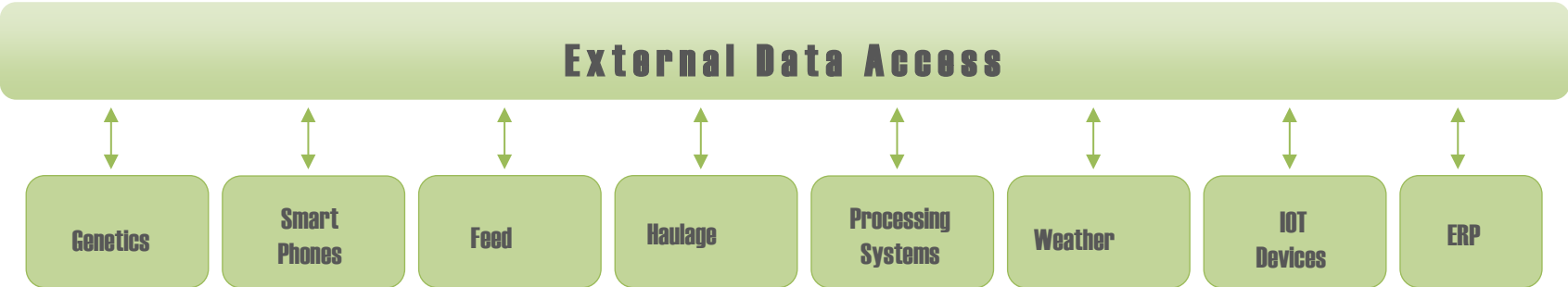
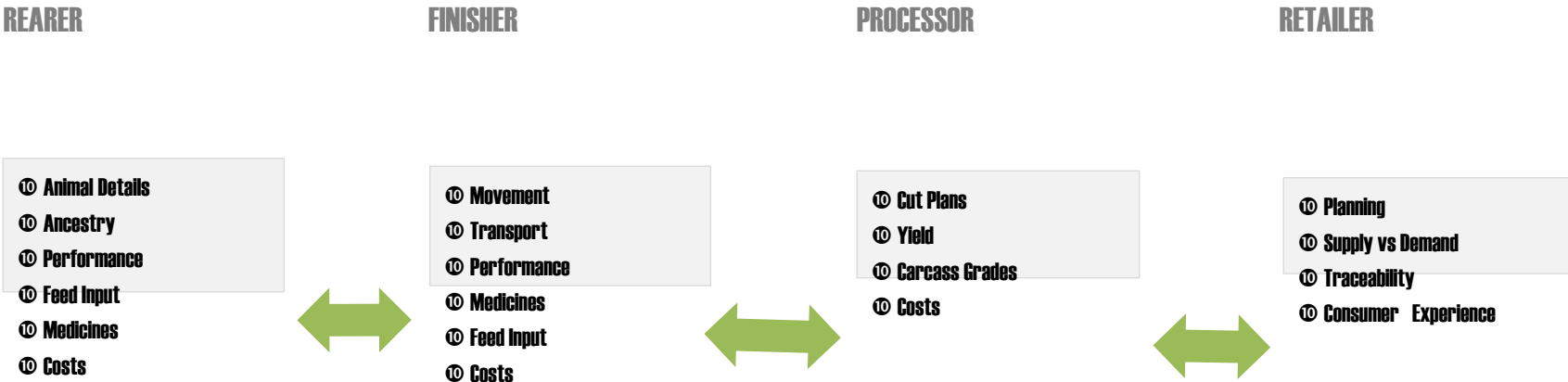
The process;

1. Collect Blood samples (2000 lambs)
2. Collect phenotype information
3. Undertake tenderness evaluation
4. Undertake DNA extraction
5. Genotype the DNA information
6. Sequence the DNA profile to identify re desirable traits
7. From this information we aim to identify a “genomic signature” to be used in breeding programmes
8. <http://www.menterabusnes.co.uk/tag/sheep-genomics>



PROTEIN VALUE CHAIN - depends on initial data collection on farm

Drive Efficiency through Measurement, Analysis & Intervention



- Reduced time to slaughter
- Increased Traceability
- Effective capacity planning
- Transparent supplier compliance
- Timely intervention
- Lower Cost of Production