

Optimizing the First Cut and Marketing Strategy

Dr. Chad Yoder
Elanco Animal Health



Discussion Topics

- Building a marketing strategy
- Top cut marketing strategy
 - When should I pull first cuts?
 - What factors impact first cut strategy?
 - Focus on impact of space?
- Subsequent cuts
 - How does execution of first cut impact subsequent cuts?
 - What else impacts decisions to market subsequent cuts?

Current Strategies

- What is your current marketing strategy?
 - How did you arrive at this strategy?
- How do you determine closeout date?
 - How does this influence your marketing strategy?
- How do you determine when to pull first cut?
- What is your strategy for selecting first cut pigs?
 - How well do you execute market hog selection?

Building a strategy

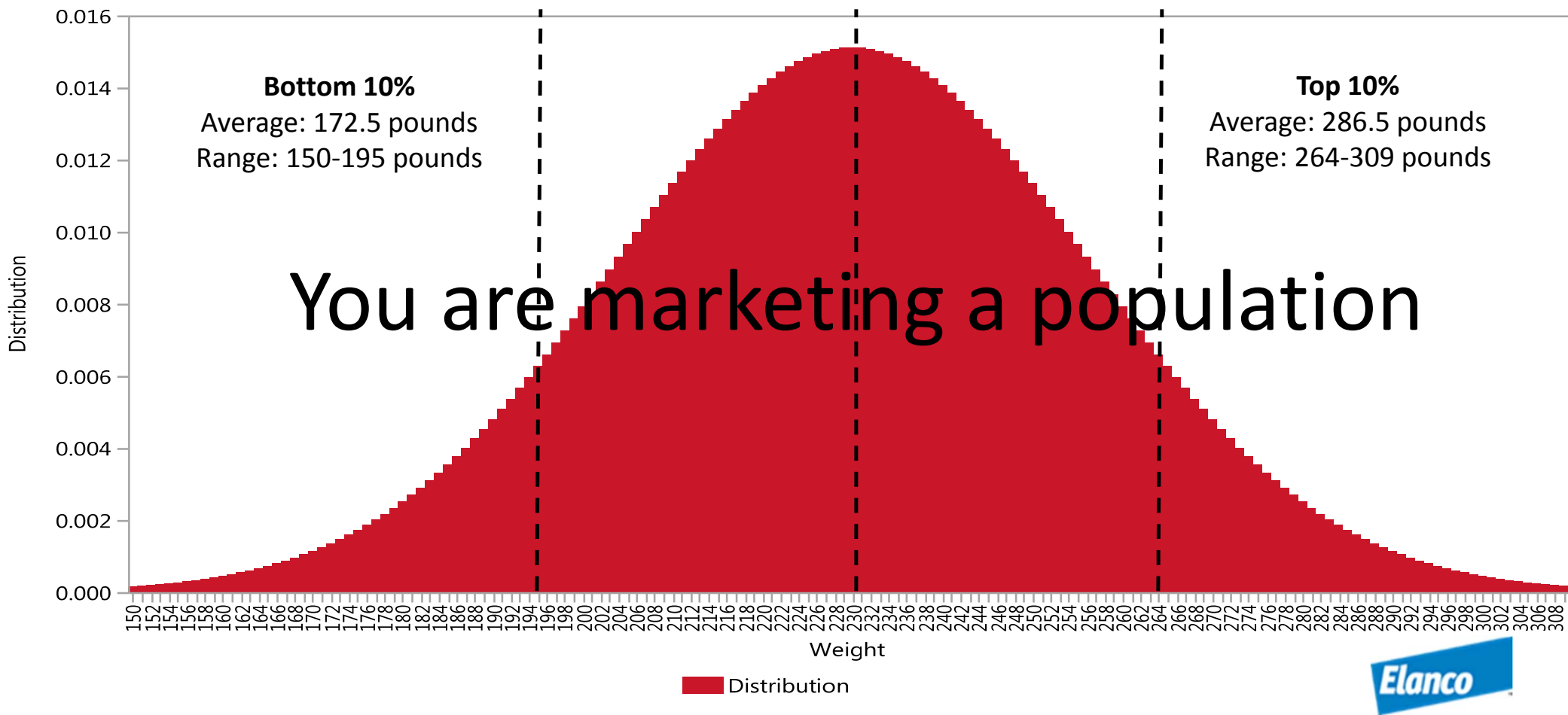
- Focus begins with optimizing the entire group
 - How do I get my biggest ROI for the entire group
 - Sub-optimize a load?
- Set a group target weight for optimization
 - Markets? Execution? Packer? Closeout date limitations?
- Set a target top cut weight
 - Will this optimize the entire group?
- Determine subsequent cuts and closeout

Factors to Consider for First Cut

- Focused on optimal marketing of entire group
- Packer Grid (sort loss v. MOF)
 - Target weight at packer
 - Current market \$
- Pig flow or source
 - Health
 - Start Weights
- Growth Curve
 - Feed intakes
 - Days on Feed
- Historical site performance
 - Seasonal Impacts
- Stocking density (space)
- Group variation
 - Fill time
- Marketing strategy & execution
 - How many cuts? What weight?
 - When do I close the group?
- Packer commitment (hd/week)
- Available Technologies

*Reminder: Every system is different and marketing strategy should reflect those differences

Average Barn Weight: 240 pounds, Standard Deviation: 26 pounds, CV: 11%



Population Distribution at First Cut

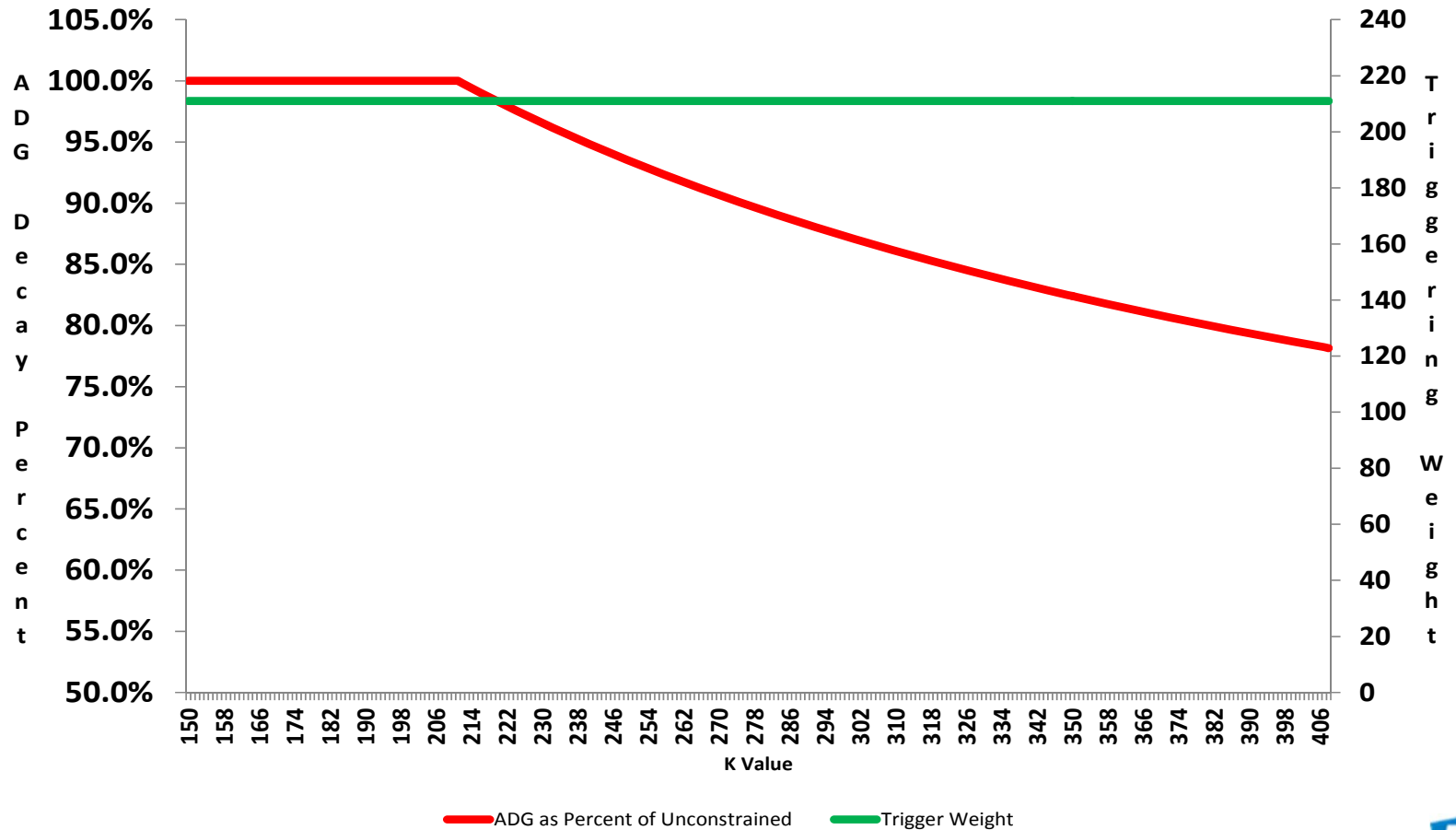
Distribution	Average Weight	Minimum Weight	Maximum Weight
Top 10%	286.5	264	309
20%	257.5	252	263
30%	247.5	244	251
40%	240.0	237	243
50%	233.0	230	236
60%	226.0	223	229
70%	219.0	216	222
80%	211.5	208	215
90%	201.5	196	207
Bottom 10%	172.5	150	195
Group	230.0	150	309

Distribution	Average Weight	Minimum Weight	Maximum Weight
Top 20%	280.5	252	309
40%	244.0	237	251
60%	229.5	223	236
80%	215.0	208	222
Bottom 20%	178.5	150	207
Group	230.0	150	309

Average Barn Weight: 240 pounds, Standard Deviation: 26 pounds, CV: 11%



ADG Decay Rate as Stocking Density Hits Critical K-Factor Value and Triggering Weight



Maximum carrying capacity = 27 lbs. of BW/sq.ft of Pen Space



Stocking Density

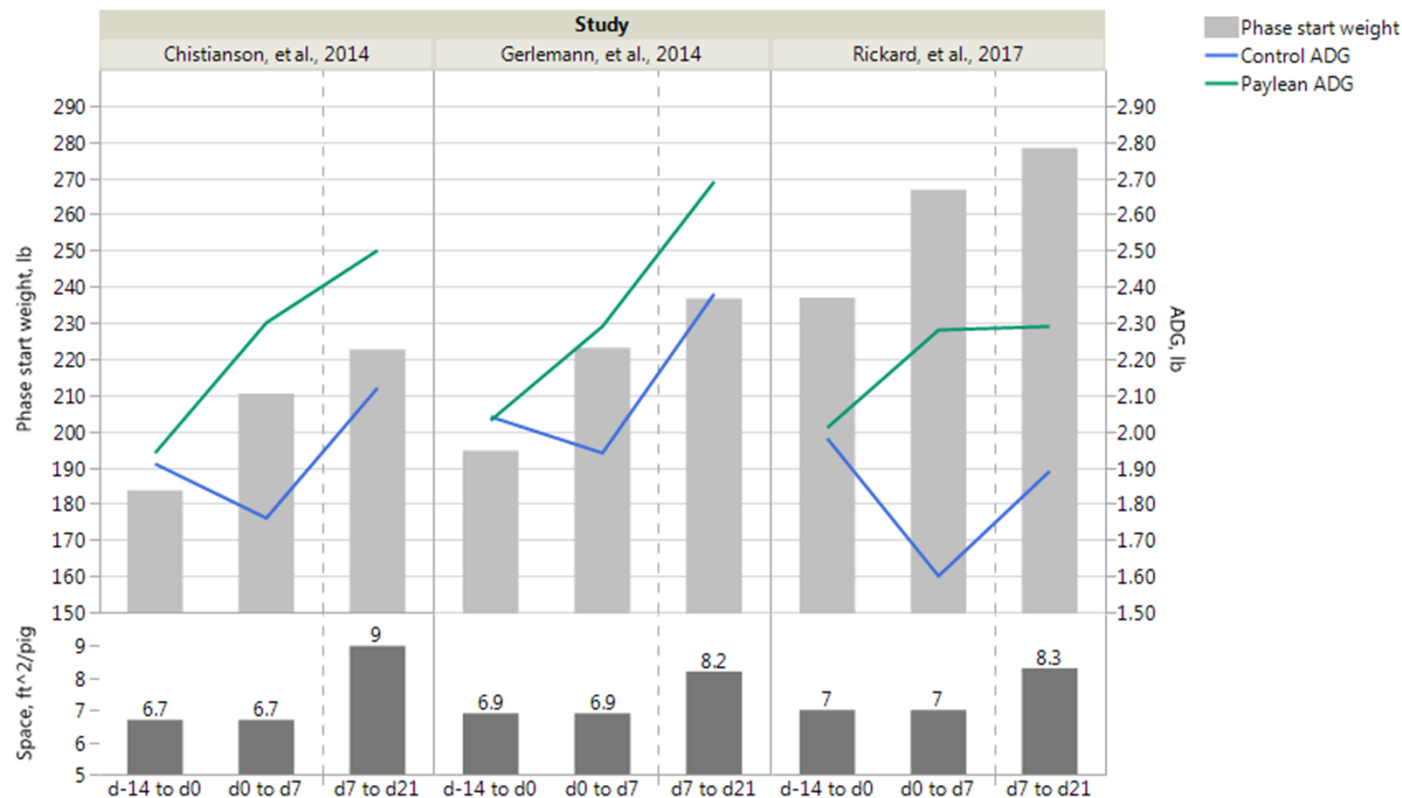
Estimated weight at 27 pounds per ft² and different initial stocking densities

Stocking Density (ft ² /pig)	7.9	7.6	7.3	7.0	6.7	6.4	6.1
Average pig weight (lbs)	231	218	205	193	181	169	157
Average weight of Top 20% (lbs)	269	254	239	224	210	196	183

- Initial stocking density and the subsequent decrease in performance may dictate when to take first cuts
- In order to take pigs heavier, initial stocking density may need to be adjusted
- Need to balance stocking density, target weight, performance, and first cut weight

ADG Response to additional space

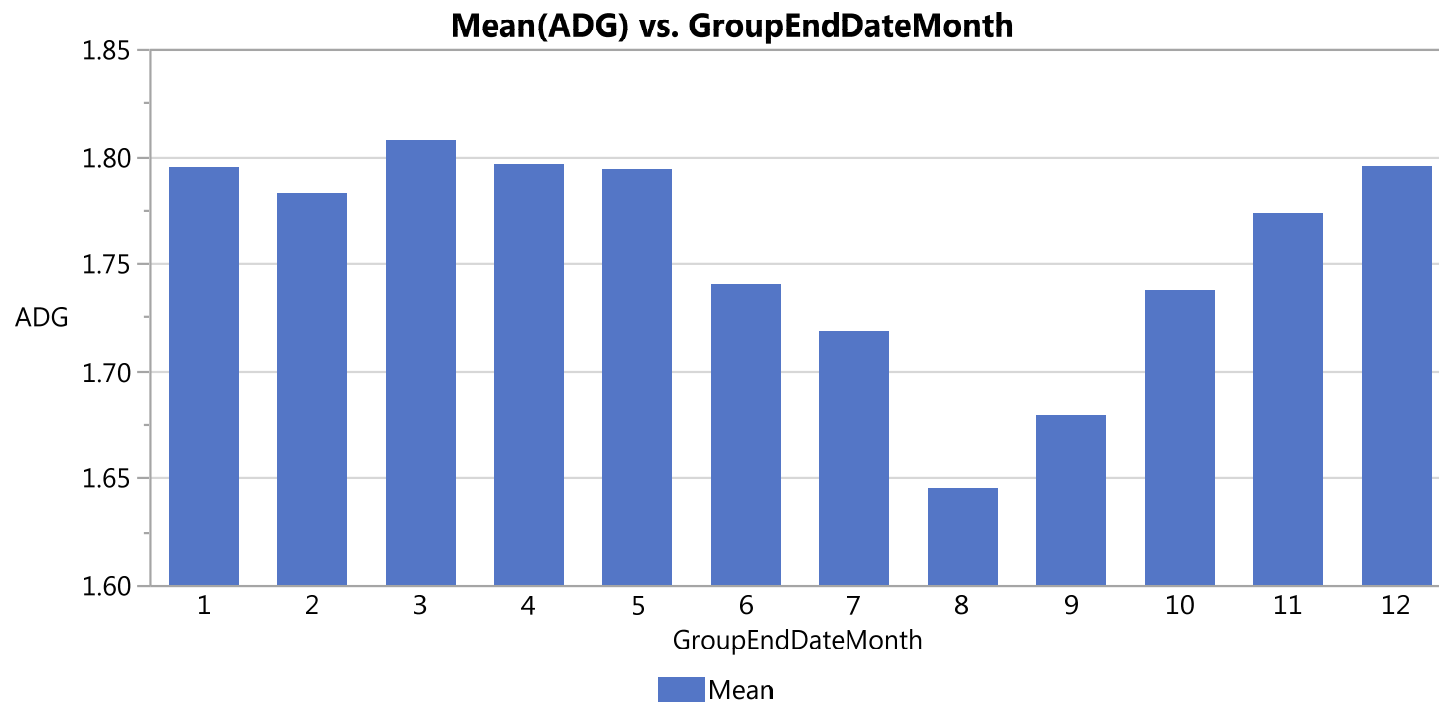
Control and Paylean treatments



USSBUPAY00109



	Mean(CarcassLiveWeight)	Mean(DOF)	Mean(ADG)
Mean(PctMortality) Binned	Mean	Mean	Mean
0.000% — 2.000%	285.7	111.2	1.88
2.000% — 4.000%	283.6	109.6	1.87
4.000% — 6.000%	282.1	111.1	1.80
6.000% — 8.000%	280.0	112.9	1.73
8.000% — 10.000%	279.3	115.1	1.67
10.000% — 12.000%	275.0	114.4	1.64
12.000% — 14.000%	275.9	118.5	1.58



Putting it all together for first cuts

- How do you incorporate all of these things simultaneously?
 - Very difficult to manage all this information in a timely fashion
- Build a model that incorporates multiple pieces of information
 - Based on historical performance
 - NOT perfect- still need “eyes in the barn”
 - Can improve accuracy/reduce system variation around top cut weights
- Be in the barn
- Understand flexibility of your system

Factors to Consider for Subsequent Cuts

- The same factors used to establish the first cut will also play a role in determining when to take subsequent cuts and how many cuts to take
 - Group target weights, growth curve, health, seasonality, fill time, closeout date etc.
 - Logistics/biosecurity
 - How many times can I get to a barn or should I sort pigs?
- Do you have flexibility? First cut execution and accuracy critical:
 - Too heavy? Too light? Just right?
 - Grid emphasis
- Space and pig flow will likely determine the last marketing date
 - Optimizing weight to the packer will drive the intermediate cuts
 - How many pigs on closeout
 - Marketing execution is essential

Reacting to First Cut data

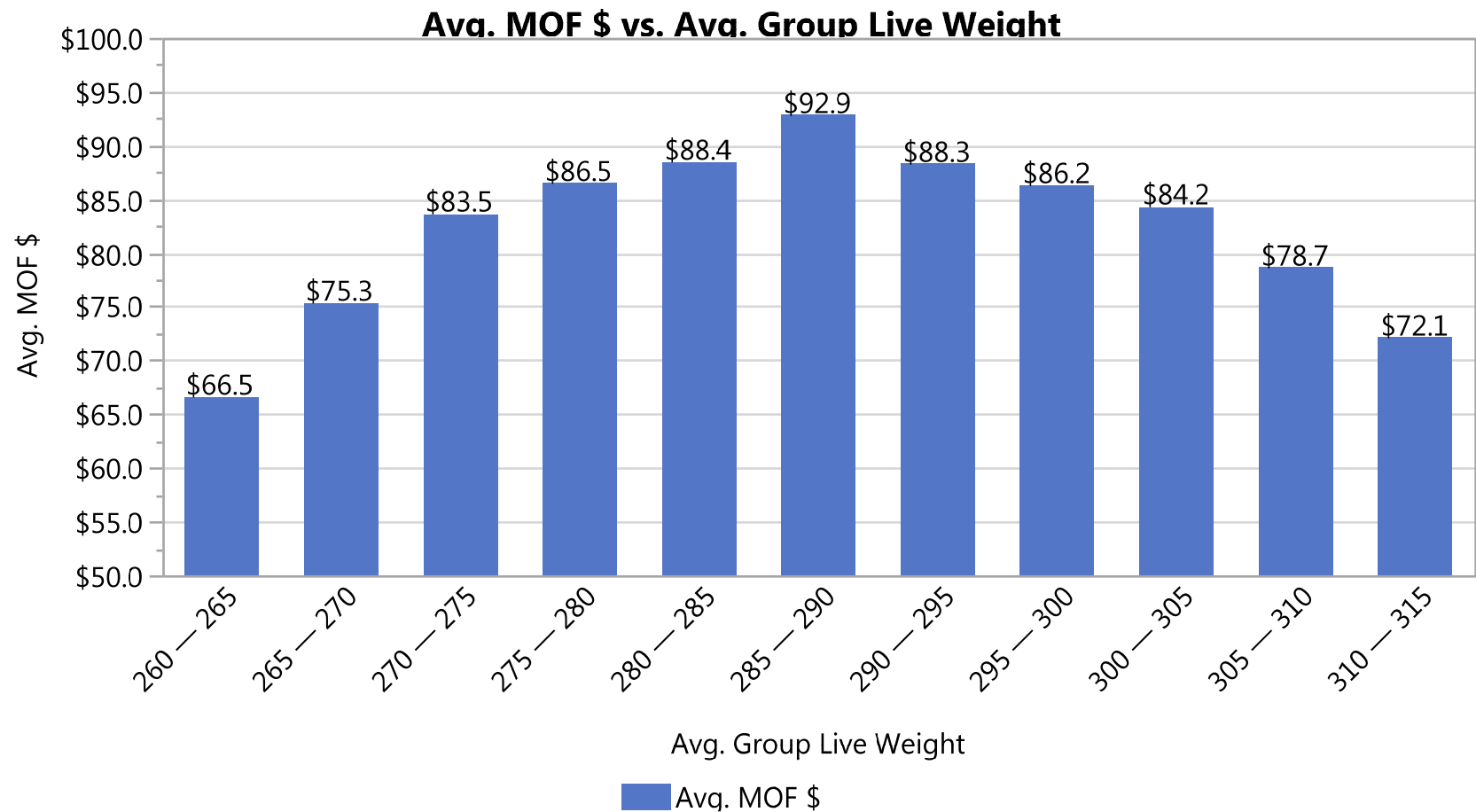
Top Cut Weights	Group Market Weight	Group Carcass Standard Deviation	2nd Cut Wt	3rd Cut Wt.	Closeout Cut Wt
250-260	270.1	19.5	268.2	274.5	268.1
260-270	275.0	18.9	276.0	281.6	271.7
270-280	279.4	18.0	280.8	282.0	274.9
280-290	285.3	18.0	289.0	289.1	279.0
290-300	290.4	18.4	294.7	295.7	280.2
300-310	297.8	19.0	303.4	300.1	286.2
310-320	301.1	19.6	309.4	304.9	288.7

Top Cut Weights	Group Market Weight	Days after Top Cut (2)	Days after Top Cut (3)	Days after Top Cut (Dump)
250-260	270.1	9.7	16.4	29.5
260-270	275.0	9.5	16.8	28.9
270-280	279.4	9.3	15.8	27.4
280-290	285.3	9.6	15.6	27.5
290-300	290.4	9.8	15.6	25.8
300-310	297.8	9.3	15.7	24.6
310-320	301.1	9.2	15.8	24.9

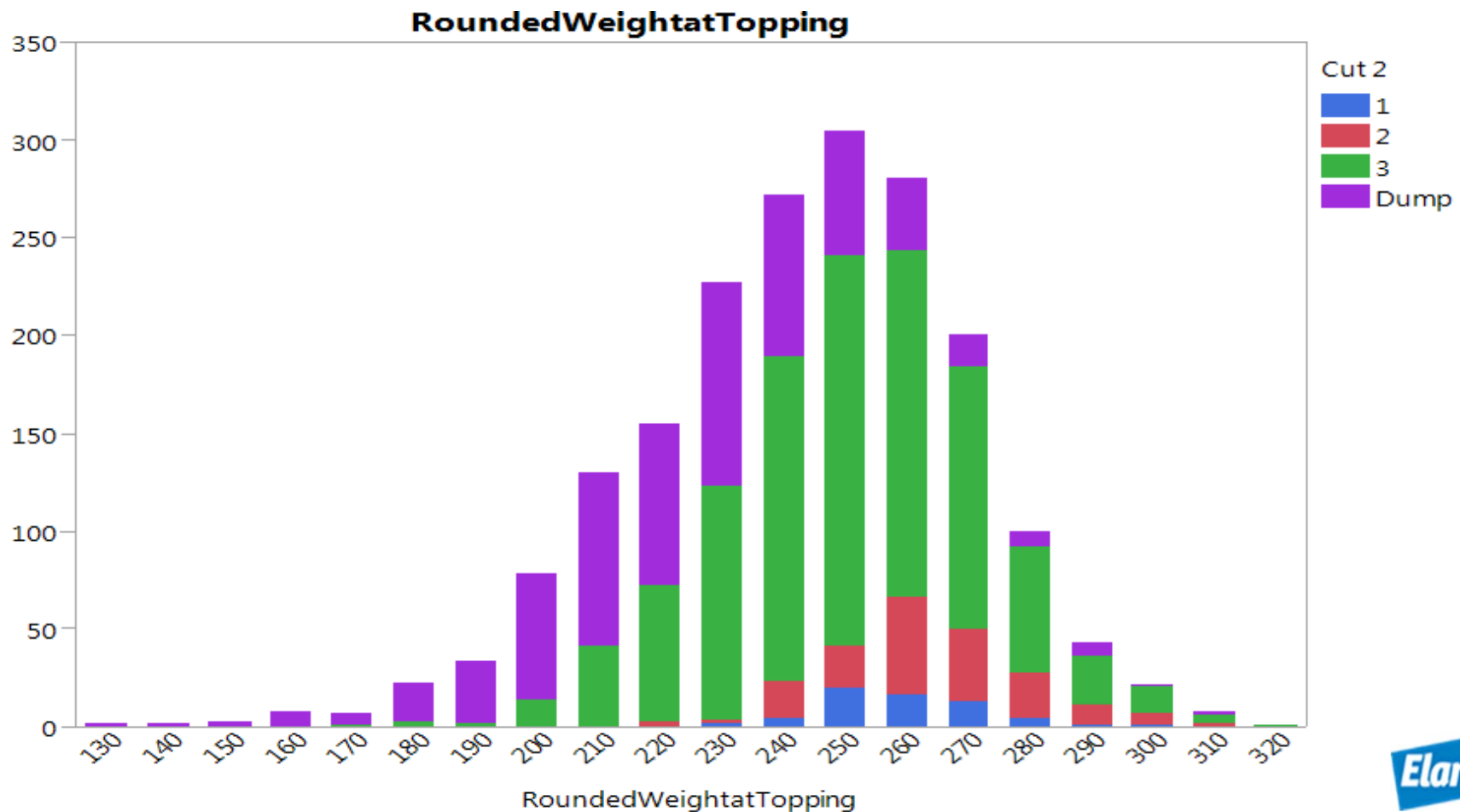


Reacting to First Cut data

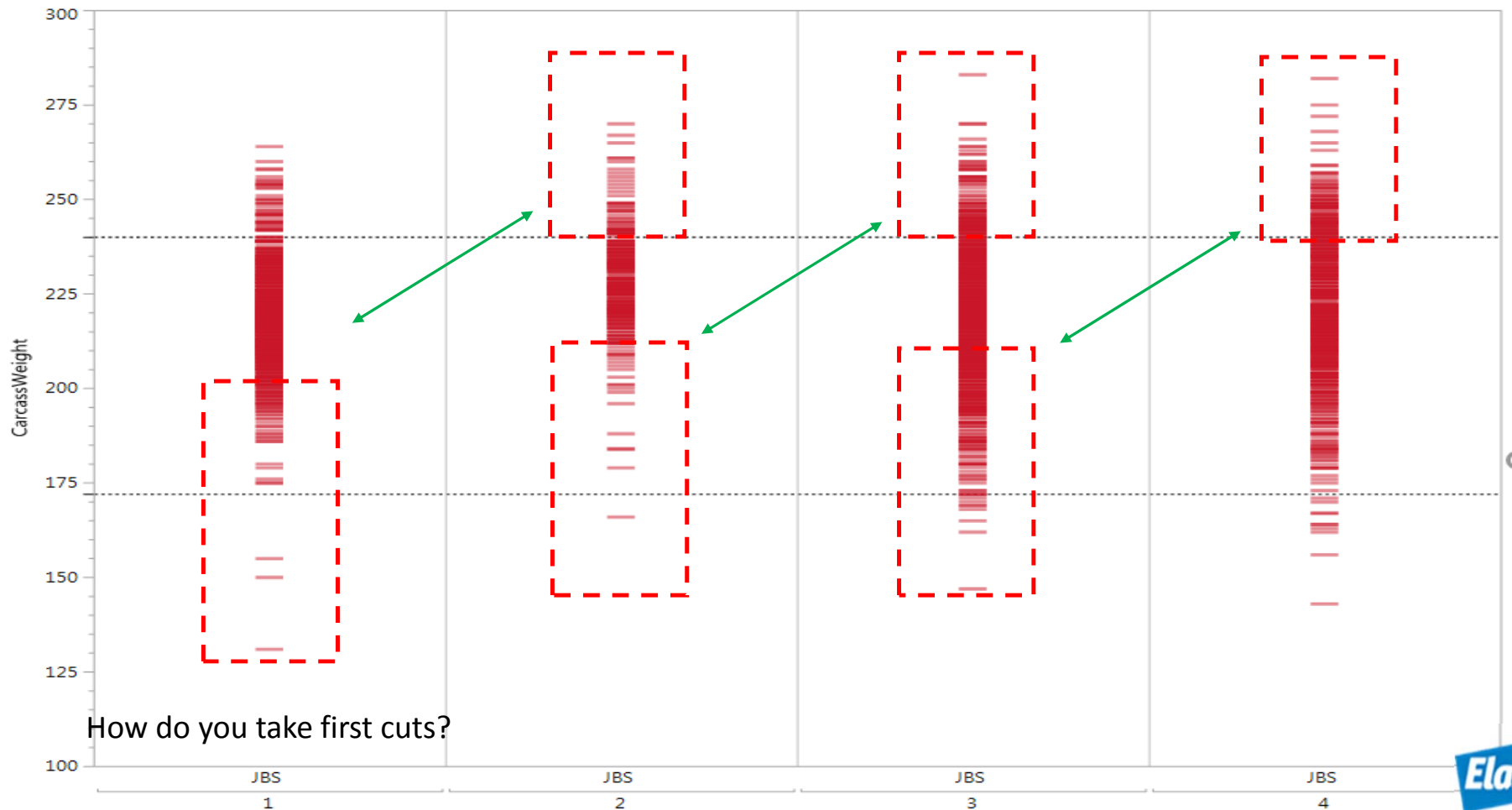
Margin Over Feed Costs by Group Average Live Weight (Closeout wt.)



Still comes down to execution

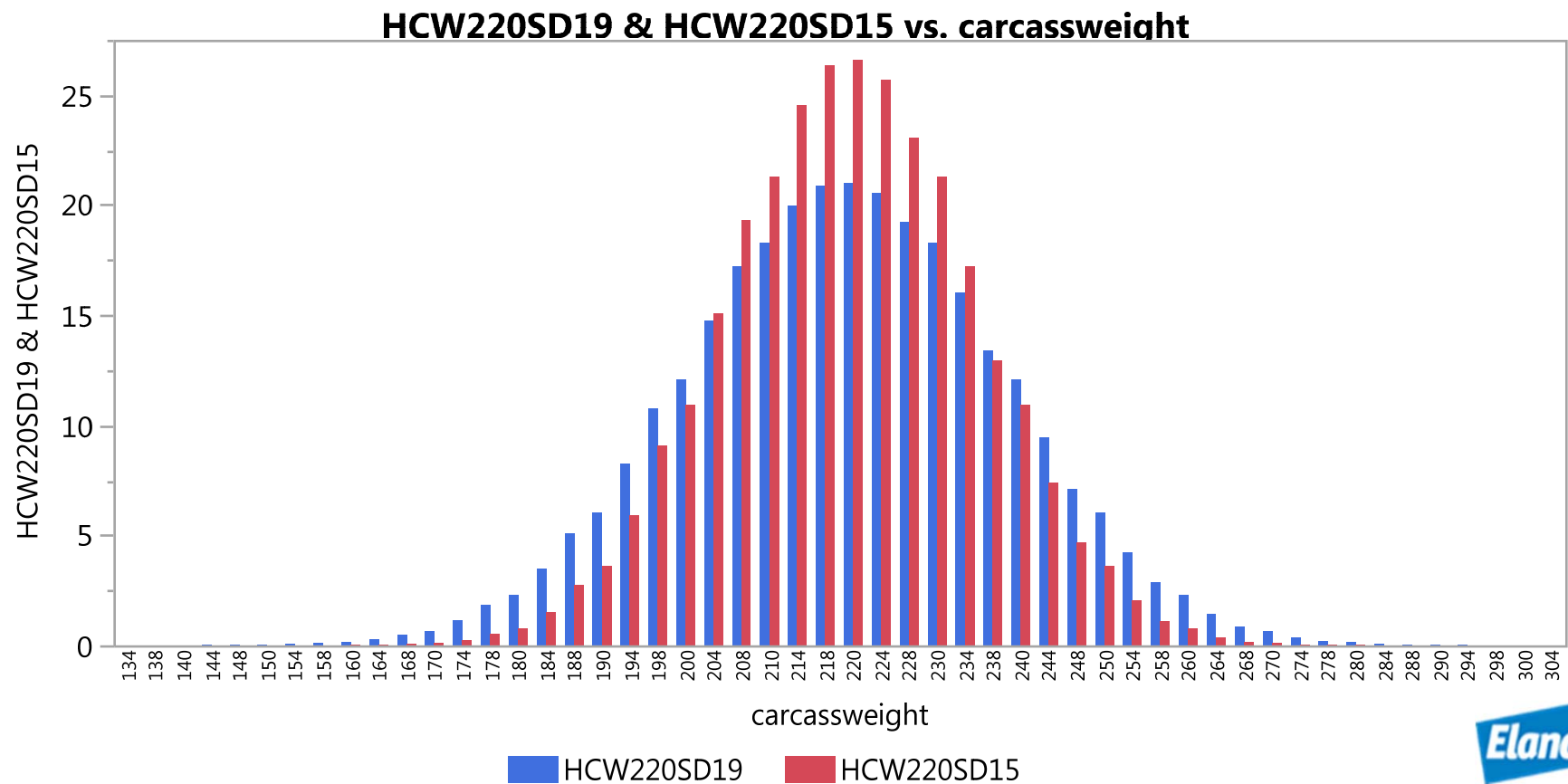


Still comes down to execution



Reducing Variation can be important

HCW 220 pounds and S.D of 19 v. 15



Optimizing Cut Strategy Summary

- **It depends**: Every system is different
- Marketing a population to maximize profit
 - Focus on optimizing the population v. optimizing each load
- Increase accuracy of first cuts
 - Space, health, growth curves, feed intakes, pig flow, grid limitations
 - Incorporating as much information as possible with easy implementation
 - Not too complicated (decision high, information flows down)
- Subsequent cuts
 - Success of first cuts?
 - Limitations (grid, pig flow, logistics/biosecurity)
- Execution: Right pig, Right Truck

**The label contains complete use information, including cautions and warnings.
Always read, understand and follow the label and use directions**

For increased rate of weight gain, improved feed efficiency and increased carcass leanness in finishing swine, weighing not less than 150 lbs.

Directions for Use:

- Feed at 4.5 to 9.0 g/ton to finishing swine in a complete ration containing at least 16% crude protein for the last 45 to 90 lbs. of gain (group average) prior to slaughter.
- No increased benefit has been shown when ractopamine concentrations in the diet are greater than 4.5 g/ton (5ppm)

No withdrawal required when fed according to label directions

Caution: Ractopamine may increase the number of fatigued and/or injured pigs during marketing. Not for use in breeding swine

Paylean, Elanco and the diagonal bar are trademarks of Elanco or its affiliates.
Other Company names are trademarks of the respective owners.
©2018 Elanco or its affiliates.



USSBUPAY00017(1)