



NutriQuest®
Business Solutions

**FBS Software Success
Summit**
August 22-23, 2018

What We Do?

- A team of industry-leading animal experts serving producers by delivering targeted breakthrough solutions aimed at helping producers:
 - Increase productivity
 - Lower costs
 - Improve business profitability and sustainability



NutriQuest's "Business Solutions" Consulting Team

- Steve Weiss, President
- Casey Westphalen, Director of NQBS
- Jennifer Brown, CFO
- Kevin Christensen, CFO
- Dennis Nuetzman, CFO
- Crystal Cappel, Staff Accountant

NutriQuest Business Solutions' (NQBS) Clients

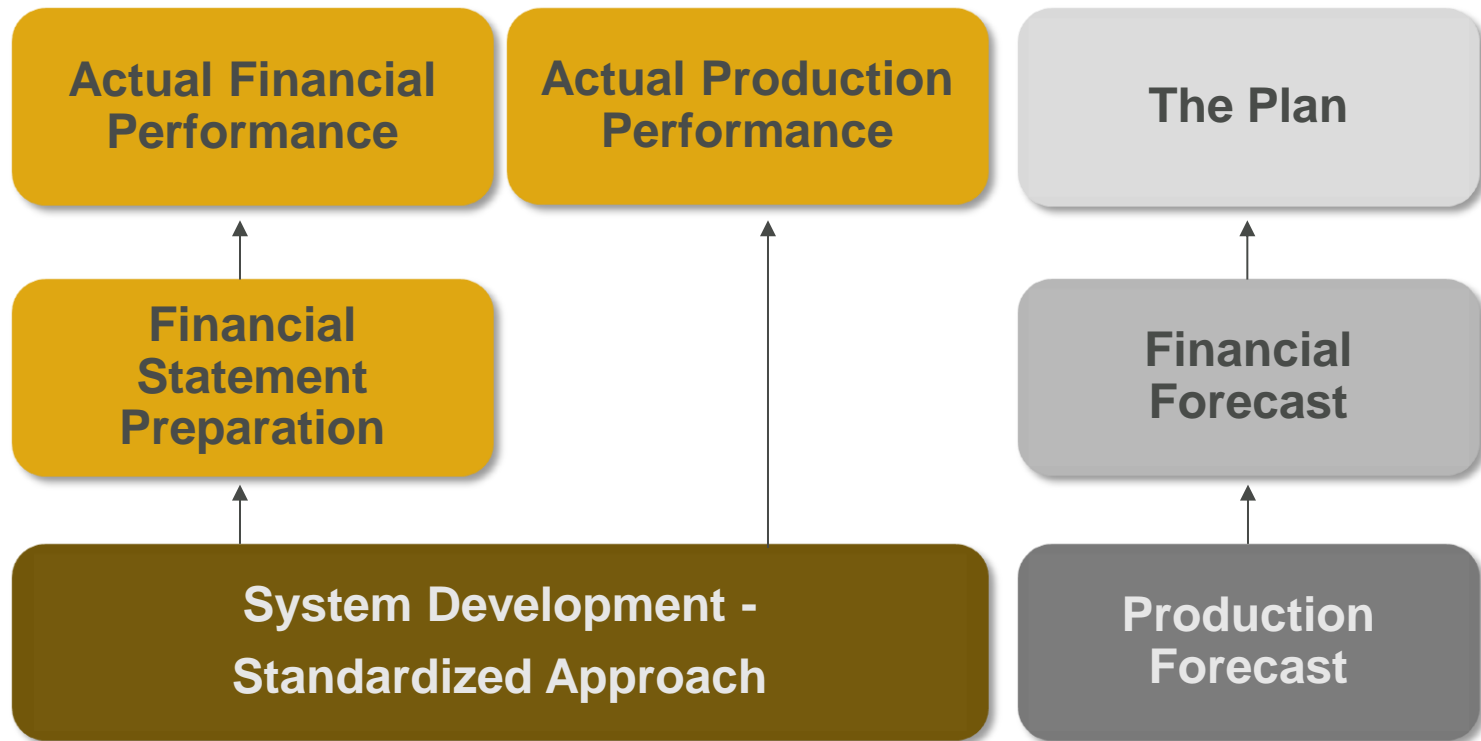


What is a CFO's role?

- Cash flow management
- Financial reporting to entity's stakeholders
- Financial planning
- Analyzing the company's financial/performance strengths and weaknesses
- Managing the financial risk of the entity

Building the Foundation

Benchmarking – Financial Opportunity Analysis



Additional NQBS Services

- Strategic planning
- Liaison with other professionals
 - Lender
 - Tax Preparer
 - Financial Statement Auditor
 - Attorney
 - Financial Advisor
 - Risk Management Broker / Consultant
- Mergers and acquisitions
- Asset Divestitures
- Financial restructuring

NQBS Swine Industry Modeling Tools

- Pork Network Commentary - Weaned pig breakeven analysis
- Marketing Contract Analysis - Optimal gross margin opportunity
- NutriQuest Right the Curve™ – Individual pig economic modeling tool
- NutriQuest Hog Crush™ – Forward margin analysis based upon CME futures pricing and producer's cost structure



12-month Forward Hog Crush

Margin per Head \$5 excluding G&A
and Financing Costs



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12 Month Forward Hog Crush

As of:

8/17/18

Sell Month	Corn Futures	Corn Basis	Corn/LCWT~	SBM Futures	SBM Basis	SBM/LCWT~	Other Feed & Drug/LCWT	Fixed Costs/LCWT	Total Cost/LCWT	LH Futures	LH Basis	Premiums - Freight	Margin Per Head
Sep-18	\$3.64	(\$0.24)	\$16.13	\$330.10	(\$13.00)	\$5.16	\$11.41	\$27.41	\$60.12	\$58.60	(\$2.01)	\$1.25	(\$4.80)
Oct-18	\$3.79	(\$0.24)	\$16.32	\$330.70	(\$3.00)	\$5.15	\$11.41	\$27.41	\$60.31	\$58.60	\$1.72	\$1.25	\$2.65
Nov-18	\$3.79	(\$0.24)	\$16.92	\$332.40	(\$1.00)	\$5.22	\$11.41	\$27.41	\$60.96	\$55.28	(\$3.70)	\$1.25	(\$17.07)
Dec-18	\$3.79	(\$0.24)	\$17.12	\$332.40	(\$1.00)	\$5.25	\$11.41	\$27.41	\$61.19	\$55.28	(\$0.65)	\$1.25	(\$11.16)
Jan-19	\$3.91	(\$0.24)	\$17.44	\$332.00	(\$1.00)	\$5.30	\$11.41	\$27.41	\$61.57	\$61.65	(\$5.42)	\$1.25	(\$8.58)
Feb-19	\$3.91	(\$0.24)	\$17.59	\$329.10	(\$1.00)	\$5.30	\$11.41	\$27.41	\$61.72	\$61.65	(\$9.14)	\$1.25	(\$16.71)
Mar-19	\$3.91	(\$0.24)	\$17.73	\$329.10	(\$1.00)	\$5.29	\$11.41	\$27.41	\$61.85	\$67.40	(\$2.79)	\$1.25	\$8.42
Apr-19	\$3.91	(\$0.24)	\$17.88	\$326.30	(\$1.00)	\$5.27	\$11.41	\$27.41	\$61.97	\$67.40	(\$3.15)	\$1.25	\$7.41
May-19	\$3.98	(\$0.24)	\$17.96	\$326.30	(\$1.00)	\$5.24	\$11.41	\$27.41	\$62.03	\$73.50	(\$4.25)	\$1.25	\$17.78
Jun-19	\$4.04	(\$0.24)	\$18.12	\$327.40	(\$1.00)	\$5.24	\$11.41	\$27.41	\$62.18	\$78.60	(\$5.99)	\$1.25	\$24.53
Jul-19	\$4.04	(\$0.24)	\$18.27	\$327.40	(\$1.00)	\$5.23	\$11.41	\$27.41	\$62.33	\$78.30	(\$4.66)	\$1.25	\$26.38
Aug-19	\$4.02	(\$0.24)	\$18.41	\$327.50	(\$1.00)	\$5.23	\$11.41	\$27.41	\$62.47	\$77.00	(\$2.24)	\$1.25	\$28.43
Average	\$3.82	(\$0.24)	\$17.49	\$330.51	(\$4.20)	\$5.24	\$11.41	\$27.41	\$61.56	\$66.10	(\$3.52)	\$1.25	\$4.77

\$61.56 COP per LCWT



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12-month Forward Hog Crush – Including G&A and Financing Costs

Margin per Head \$0 to \$(5)

<i>G&A and Financing Costs</i>	<u>Per Head</u>	<u>Per lcwt</u>	<u>Avg 12 mos Cost/LCWT</u>	<u>Avg 12 Mos Margin per head:</u>
at	\$0.00	\$0.00	\$61.56	\$4.77
	\$5.00	\$2.38	\$63.94	(\$0.23)
	\$7.50	\$3.57	\$65.13	(\$2.73)
	\$10.00	\$4.76	\$66.32	(\$5.23)

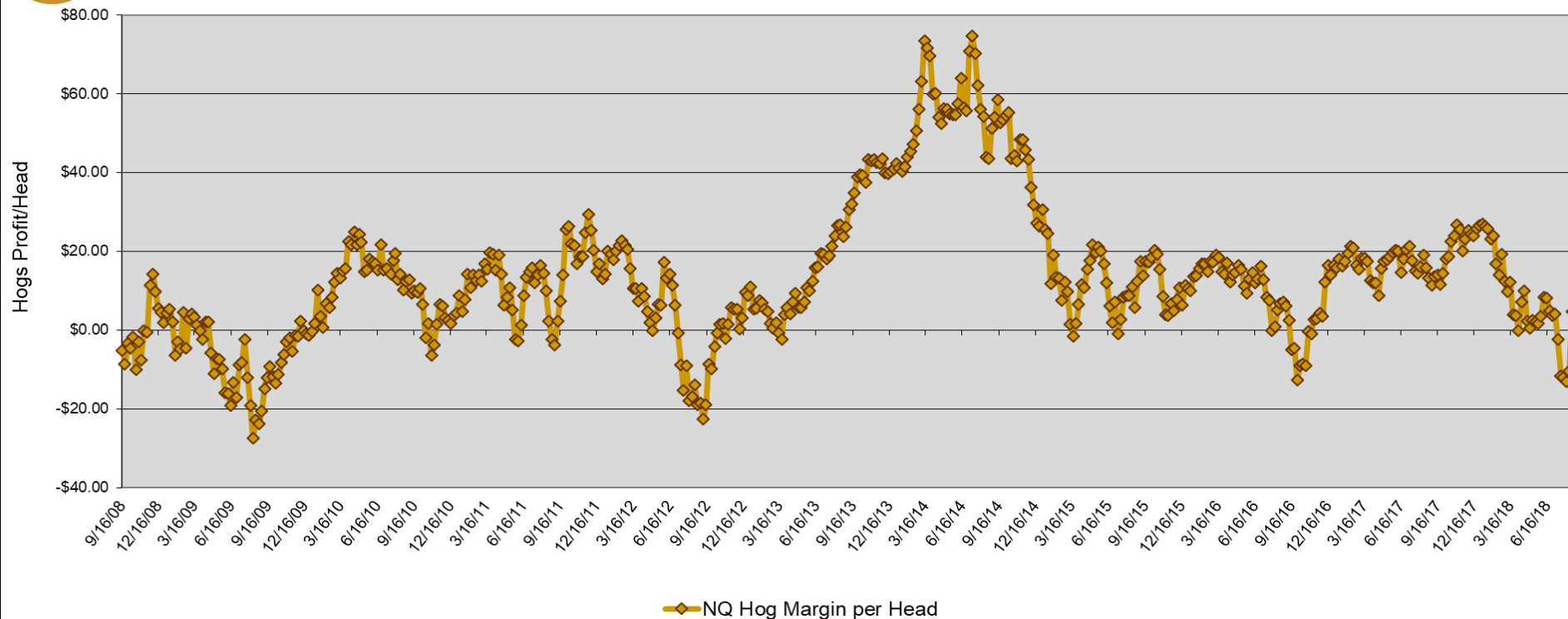
2008 – 2017 Forward Hog Crush

	Historical	Pre 2014	Excl 2014	Post 2014
Average	\$ 17.26	\$ 7.71	\$ 8.87	\$ 11.43
St Dev	\$ 17.79	\$ 13.90	\$ 12.40	\$ 7.60



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Hogs Forward Profit Trends



◆ NQ Hog Margin per Head



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“Weighted” Customized Crush

Producer's Cost and Production Structure + Forward Protection

Month	Revenue					Per pig Cost of Production	Margin per Pig Today's Price
	Projected Marketings	Average Short	% Marketed	Futures	Wtd Price With Basis		
Jan'17	40,000	\$ 68.50	99%	\$ 54.65	\$ 69.34	\$ 139.42	\$ 9.19
Feb'17	37,500	\$ 68.50	80%	\$ 54.65	\$ 66.76	\$ 139.50	\$ 3.58
Mar'17	41,500	\$ -	0%	\$ 61.00	\$ 62.00	\$ 139.39	\$ (6.51)

NutriQuest Business Solutions Tool Box and Services Profile

**Customized
Hog Crush**

**Marketing
Contract
Analysis**

**Business
Interruption
Coverage
Limits**

**Income Tax
Planning Tool**

Benchmarking – Opportunity Analysis:

1. Actual Performance to Plan Analysis

2. Actual Performance compared to Industry

**System
Development**

**Financial
Statements**

**Production
Forecasts**

**Financial
Forecast**



Kevin Christensen

kevinchristensen@nutriquest.com

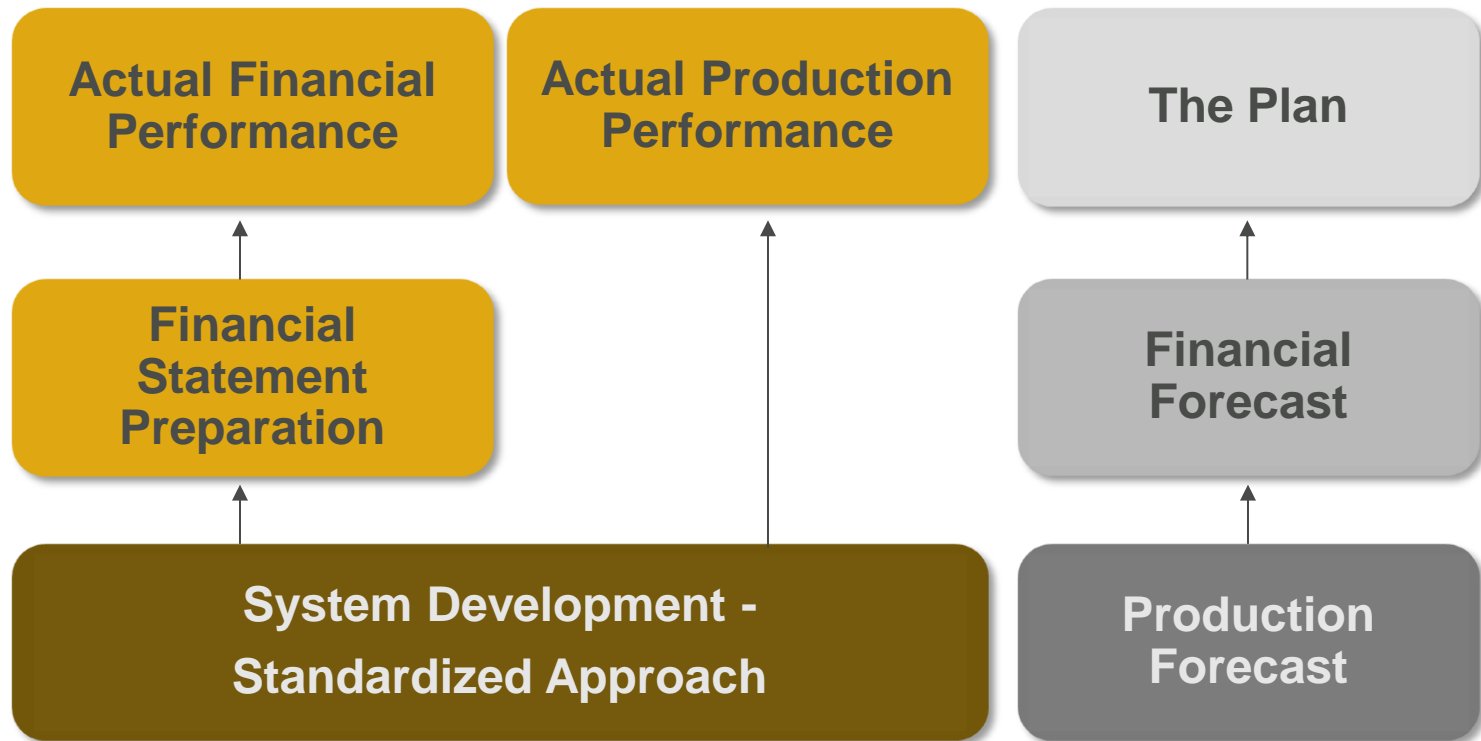
Cell: (712) 571-0713

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Building the Foundation

Benchmarking – Financial Opportunity Analysis



The Plan – Bottom Up

- Bottom up projections
 - Begin with the drivers of the operation
 - Start with sow production drivers:

	16 Week Average	Current Forecast Assumption
<u>Breeding</u>		
Matings per week	194	200
Farrowing Rate	91.49%	92.50%
Litters [CALC]	177	185
Weaned/Litter	12.02	11.10
Weaned Pigs Produced	2,134	2,054

The Plan – Bottom Up

- Bottom up projections
 - Using historical production records
 - 52 week sow performance report in conjunction with 16 week farrowing report
 - Modeling changes to the system
 - Performance improvement
 - Operational Growth
 - Health issues
 - PEDv
 - PRRS

The Plan

- The sow performance targets drive the calculations for:
 - Feed usage and costs
 - Weaned pig output which feeds into nursery and finishing flow
- Nursery and Finishing Animal Flow
 - Feed usage and costs
 - Marketing
 - Yardage – capacity v. utilization assessment

Production Drivers – Actual to Budget (Sow metrics)

Key Drivers	Actual	Budget	Variance
Sows = # of Head	9,000	9,100	(100)
Gilts= # of Head	1,200	1,250	(50)
Sows Culled = # of Head	4,680	4,550	130
Sows Death = # of Head	720	910	(190)
Tons Fed	12,500.00	12,300.00	200.00
Cost per Ton	\$ 255.60	\$ 226.83	\$ 28.77
Total Matings	24,100	24,080	20
Farrowings	21,931	21,672	259
Farrowing Rate	91.0%	90.0%	1.0%
Pigs Weaned - # of Head	263,611	240,559	23,051

Financial + Production

Comparison: Actual to Budget

	Year to Date			Per Pig Weaned		
	<i>Actual</i>	<i>Budget</i>	<i>Variance</i>	<i>Actual</i>	<i>Budget</i>	<i>Variance</i>
Expenses						
Feed	3,000,000	2,600,000	400,000	11.38	10.81	0.57
Grind Mix Del	195,000	190,000	5,000	0.74	0.79	(0.05)
TOTAL FEED	3,195,000	2,790,000	405,000	12.12	11.60	0.52
Income - Cull Sales	(900,000)	(875,000)	(25,000)	(3.41)	(3.64)	0.22
Cull & Dead Sows	1,200,000	1,210,000	(10,000)	4.55	5.03	(0.48)
Depreciation	1,800,000	1,810,000	(10,000)	6.83	7.52	(0.70)
Gas, Fuel & Oil	10,000	11,000	(1,000)	0.04	0.05	(0.01)
Genetic Pmt	263,600	240,000	23,600	1.00	1.00	0.00
Insurance	250,000	245,000	5,000	0.95	1.02	(0.07)
Interest Expense	200,000	195,000	5,000	0.76	0.81	(0.05)
Repairs & Main-Sows	350,000	355,000	(5,000)	1.33	1.48	(0.15)
Breeding Expenses	250,000	300,000	(50,000)	0.95	1.25	(0.30)
Utilities	300,000	295,000	5,000	1.14	1.23	(0.09)
Vet/Med and Supplies	950,000	960,000	(10,000)	3.60	3.99	(0.39)
Wages	1,600,000	1,400,000	200,000	6.07	5.82	0.25
TOTAL Expenses	\$9,468,600	\$ 8,936,000	\$ 532,600	\$ 35.92	\$37.15	\$ (1.23)
Cost Variance						\$ 2.21
Thruput Variance						\$ (3.44)

Financial + Production

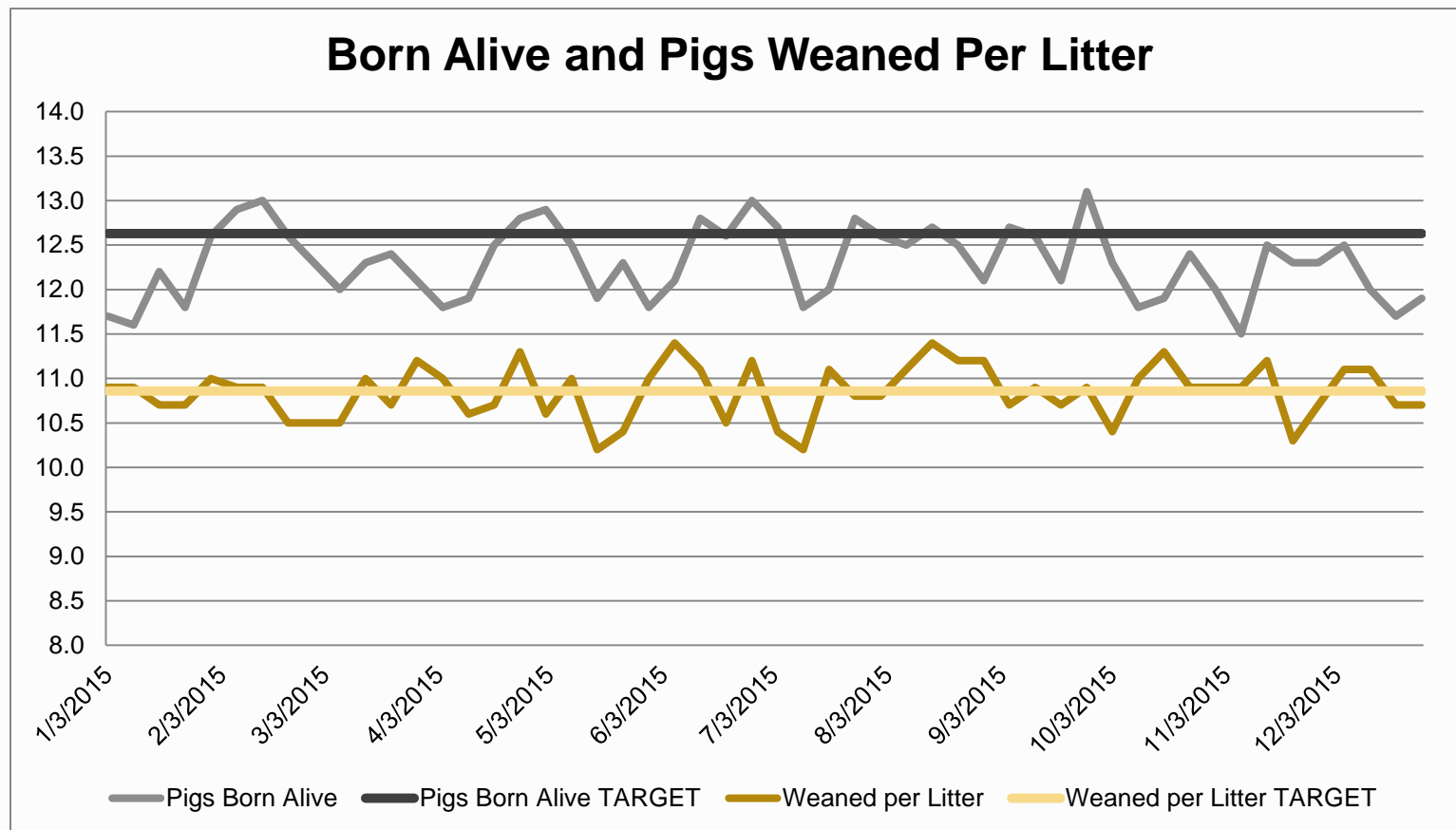
Comparison: Actual to Budget

Key Drivers	Actual	Budget	Variance
Tons Fed	12,500.00	12,300.00	200.00
Cost per Ton	\$ 255.60	\$ 226.83	\$ 28.77

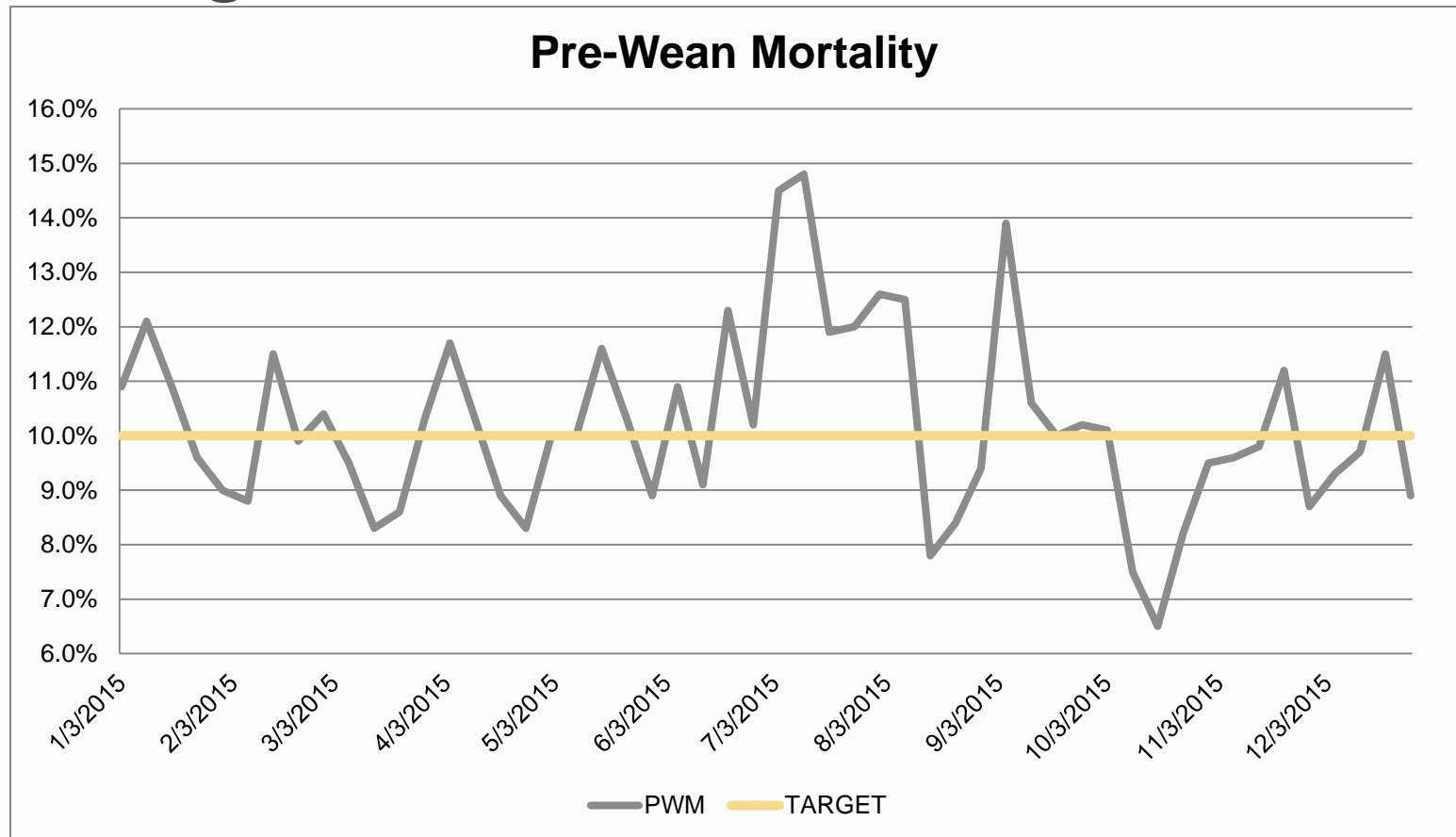
	Year to Date			Per Pig Weaned		
	Actual	Budget	Variance	Actual	Budget	Variance
Expenses						
Feed	3,000,000	2,600,000	400,000	11.38	10.81	0.57
Grind Mix Del	195,000	190,000	5,000	0.74	0.79	(0.05)
TOTAL FEED	3,195,000	2,790,000	405,000	12.12	11.60	0.52

FEED Variance Analysis	
Price Variance	\$ 353,880
Quantity Variance	\$ 51,120
Total Feed Variance	\$ 405,000

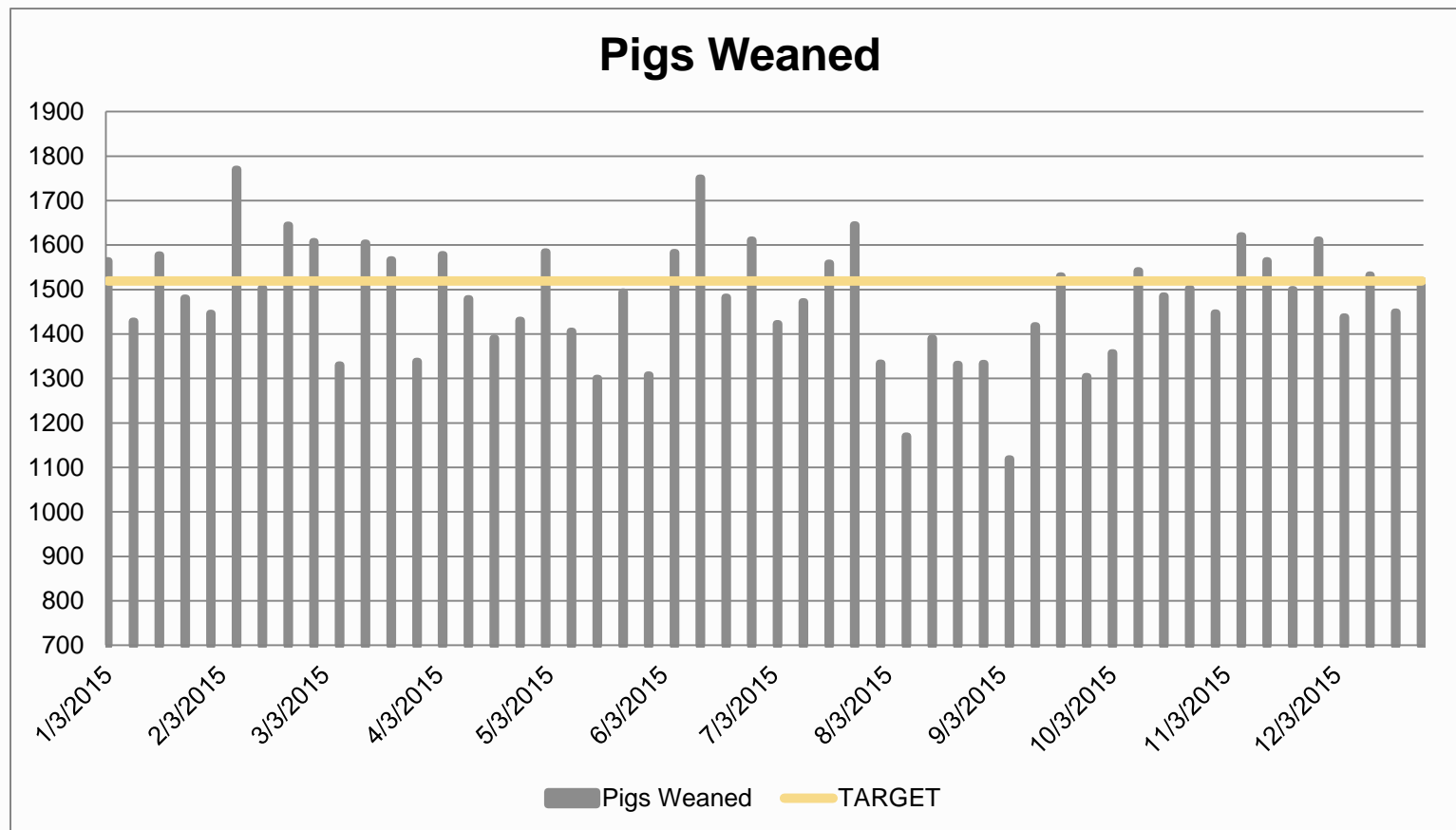
Production Drivers – Actual to Budget



Production Drivers – Actual to Budget



Production Drivers – Actual to Budget



The Plan – Farrow-to-Finish

- Financial plan - output
 - Commodity planning
 - Monthly feed ingredient requirements
 - Monthly livestock sales
 - Income Statement
 - Cost of production
 - Balance Sheet
 - Comparison to loan covenants
 - Statement of Cash flow
 - Short and long-term financing needs

The Plan – Farrow-to-Finish

- Production plan – Feed requirements

CORN		<i>Month 1</i>	<i>Month 2</i>	<i>Month 3</i>	<i>Total</i>
Sows	BU	34,975	31,639	39,925	352,000
W-F	BU	201,777	190,108	234,168	2,108,088
Total	BU	236,752	221,747	274,093	2,460,088

- Production plan – Marketing volumes

LEAN HOGS		<i>Month 1</i>	<i>Month 2</i>	<i>Month 3</i>	<i>Total</i>
Marketing Volume		29,328	27,512	34,036	306,408
Packer 1	Contract	9,320	9,320	9,320	9,320
Packer 2	Open Mkt	14,008	12,192	18,716	222,088
Packer 3	Contract	6,000	6,000	6,000	75,000
Total		29,328	27,512	34,036	306,408



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Questions?

Consulting CFO Services

- Helping producers
 - Increase productivity
 - Lower costs
 - Improve the profitability and sustainability of their business





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