"Using Management Accounting to Link Performance Analysis & Strategic Thinking"

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My Background…

- Former Ag Lender - FCS
- Partner in diversified family farm
- Consultant
  - Farm Family Transitions, Financial Planning
- Industry boards
  - ***Farm Financial Standards Council – President***
  - ***PNW Direct Seed Association – Director, Past President***
  - Commodity group and bank boards – *Past Director*

50 Presentations - Management Accounting since 2003!

- Producer Workshops
- Bankers
- Accountants
- Educators
- Consultants
- NoTill/Conservation & Commodity Mtgs.

Agenda

- Overview of FFSC & evolution from building Financial Analysis Guidelines to MA
- Introduce Management Accounting & it's Importance to Sustainability of Ag Businesses
- Link between MA and Strategic Decision Making
- Introduce tools for using ABC
- Review teaching strategies & grower experiences from early exposures of MA

Reference material available:
www.ffsc.org, www.wittmanconsulting.com

FFSC – History & Activity

- Organization
  - task force 1989; incorporated in 1993; name changed to FFSC in 1994
- Structure – non-profit volunteer board with 40 members representing …
- Two primary meetings annually – Annual Meeting and **Summer Symposium**…now combined
- Several working committees & task forces meet as needed

Significant Milestones prior to FFSC Formation

- 1st "standards" initiative – 1978 lead by FCA
  - Impact: first effort to standardize financial statement design & ratio analysis in FCS
  - FmHA involvement lead to adoption of CFS
- Farm Crisis in 1980's –
  - reinforced importance of CDRC, professional financial analysis in credit extension
  - Still void in "one voice approach" for agriculture re: financial analysis standards and guidelines

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FFSC—Mission

THE MISSION OF THE COUNCIL

- *provide national forum for standards and implementation*
- *for preparers and users of agricultural financial information*
- *Goal: uniformity and integrity in financial analysis and reporting*

Our Vision:

- *identify areas where standards are needed*
- *standards supplement general accounting and financial guidelines*
- *standards are developed in a timely manner*
- *Council efforts are perceived as "the" authority*
- *standards readily accessible to customers*

Ag Credit Analysis—FFSC

FFSC—3 Primary Goals

- Establish standards for format and content of financial reports of agricultural producers
- Identify key financial measures (usually ratios) and establish standardized methods for calculations
- Encourage development of national agricultural financial database (benchmarking foundation)

Ag Credit Analysis—FFSC

History of the "Financial Guidelines for Agriculture Producers"

- Original report issued May 1991—guidelines became Council's "product" for Ag lenders, professional practitioners, consultants, farm management educators
- Cash to accrual appendix issued in November 1993
- Major revisions/enhancements issued in July 1995
- "Disclosure by Notes" and glossary, December 1997… many minor revisions over next 5 years
- MA Project began in 2000
- 2006 Released 1st Draft – Managerial Accounting to public
- 2013 – New guidelines: Hedging & Derivatives

Ag Credit Analysis—FFSC

#1 Concern–2008,2009,2010-14
U. S. & Canadian Farms/Ranches

- Rising input costs
- Timeline before commodity prices come back to "normal"
- **VOLATILITY = normal**

1998 vs 2013 Prices

Source: Russell Consulting – Sept 2013 Farm Journal Magazine

The Difference 15 Years Can Make

	1998	2013	% Change
Dow Jones Industrial Ave.	7,908	14,840	4.29%/year
Federal Funds Rate	5.50%	~.25%	-100%
Prime Rate	8.5%	3.25%	-62%
10-Year Treasury Bills	5.54%	2.73%	-49%
Gold (lb.)	$290	$1,470	+11.43%/year
Copper (lb.)	66¢	$3.23	+11.17%/year
Oil (barrel)	$8.74	$101	+17.72%/year
Lean Hogs (cwt.)	$38	$96	6.37%/year
Live Cattle (cwt.)	$58	$128	5.42%/year
Land (acre)	$1,801	$8,296	10.72%/year
Corn (bu.)	$1.99	$7.27	9.02%/year
Soybeans (bu.)	$5.85	$15.36	6.65%/year
Wheat (bu.)	$3.17	$7.52	5.93%/year

?????????

2014-2016

Where does U. S. stack up against world competitors in Cost of Production?

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Cost of beef production

Region	US$/ton
European Union	3,072
United States	2,629
Australia	1,571
Brazil	1,000

Source: 2004 Scot Consultancy/European Comition

World Beef Prices

Falling price makes Australian beef more competitive

World beef prices	Aug. 12 US$/lb.	Aug. 13 US$/lb.	Percent change
Uruguay	0.89	0.91	2.6
Australia	0.92	0.67	-27.2
U.S.	1.20	1.23	3.0
Argentina	0.77	0.79	2.4
Canada	1.23	1.43	15.8
New Zealand	0.87	0.87	0.0

SOURCE: RABOBANK COMPILATION

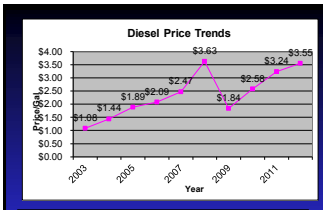
Source: November 2013 Farm Futures – Rabobank Compilation

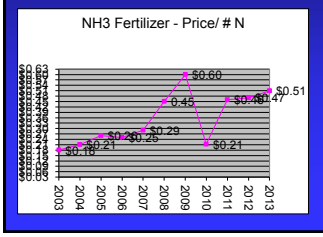
Milk Cost of Production/cwt

	2007		2012 PNW	
Income	$19.24		$19.39	
Feed	$7.76	52%	10.53	58%
Labor	1.57	11%	1.70	9%
Herd Replmt	1.36	9%	1.29	7%
Other*	4.26	28%	4.71	26%
Prod Cost	$14.95	100%	$18.23	100%
Interest	.80		.47	
UCOP	$15.75	82%	$18.70	96.4%
Net Income	$ 3.49	18%	$ .69	3.6%

Source: 2007 Clients-CA, AZ, ID, NM OK Client Data
Moore Stephens Wurth Frazer & Tarbet, LLP

06 07 2007





Original Cost = $60k + $90k

Replacmt Cost=$300+$250k

Benefits of MA Adoption

- Optimizing equipment procurement strategies – buying, leasing, sharing, etc.
- Understanding of overhead costs and strategies that streamline costs
- Foundation for adding new ventures; shedding non-viable enterprises (R***ead Good to Great Jim Collins)***
- Improved marketing—based on cost of production, target margins
- Foundation for evaluating segment managers

Threats – Living in MA Vacuum

- React too late to cost of production increase (→ BIG danger in high price cycle)
  - Fuel, labor, equip, fertilizer, transportation
- Can't isolate costs that are out of line
  - Direct Input Costs? …or Indirect (Overhead)?
  - Consequence: No clue about corrective strategies

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How does MA tie to Mgr's Job?

→**...Global pressure for *CONTINUOUS BUSINESS IMPROVEMENT***

- Assess performance in manageable segments
- Enable decision-makers to link analysis with strategic planning
- Empower improved decisions
  → increased ROE, ROA

...empower a skilled team of *responsibility center managers* to make quality decisions.

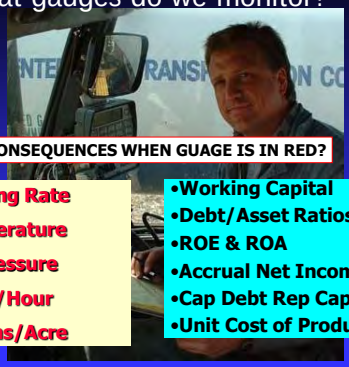
Questions We Ask Constantly…

- Which strategies are successful?
- Which strategies should change?
- How will change impact performance?
- What information needed to make better decisions and survive?

Characteristics of a Good Decision

- Optimizes financial results – least cost, most profitable
- Improves or sustains profitability
- Financially feasible – Cashflows, services debt, supports family living
- Contributes to long-term financial soundness – *proactive...not reactive*
- Promotes quality of life and teamwork

What gauges do we monitor?



What are CONSEQUENCES WHEN GUAGE IS IN RED?

Seeding Rate
Temperature
Oil Pressure
Acres/Hour
Gallons/Acre

- **Working Capital**
- **Debt/Asset Ratios**
- **ROE & ROA**
- **Accrual Net Income**
- **Cap Debt Rep Capacity**
- **Unit Cost of Production**

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What Key Farm Management Proficiencies should we master to manage a farm with excellence?

?

Survey Results*
Percent Adoption of Key Farm Management Proficiencies

Management System/Personnel Management Proficiencies	'01 – '13 Range	AVE	2014
Mission, Vision, Values defined	22 – 44	34	42
History documented	17 – 59	41	48
Goals and Objectives documented	13 – 44	29	21
Operating Plan and Cashflow Budget compiled annually	38 – 63	48	47
Strategic Plan in place that periodically addresses strategic issues	16 – 41	28	27
Written Job Descriptions/Division of Responsibility in place	29 – 44	37	31
Personnel & Operating Policies written & distributed	18 – 46	32	34
Standard Operating Procedures documented-repetitive duties	15 – 41	25	20
Compensation program matched to market rates	25 – 51	38	35
Performance Appraisals done regularly	12 – 37	24	16
Performance Records shared regularly - key managers, owners	26 – 53	37	26
Hold regular meetings of investors, owners, spouses	26 – 56	47	43
Use technology to access management information	31 – 79	67	57
Put Critical Agreements in writing (buyouts, plans, policies, etc)	24 – 49	35	35

<1/3 set goals & strategic plans, <1/3% formalize duty statements
1/4 do performance appraisals; 40% share records regularly
20% have SOPs

*Surveys administered to participants of TEPAP Program

Survey Results
Percent Adoption of Key Farm Management Proficiencies

Financial Management Proficiencies	TEPAP '01-'13	AVE	2014
Financial records updated and circulated monthly	44 – 68	54	55
Balance sheets & income statements prepared annually (12/31 basis)	89 – 100	96	97
Balance sheets reflect cost and market values & deferred tax liability	34 – 75	54	48
Income statements calculate cash (tax) and accrual net income	48 – 80	66	76
Audit systems in place to assure financial statement integrity	36 – 73	60	61
Profit and Cost Center performance is tracked on at least annual basis	30 – 60	47	44
Budget Projections and Performance reports are used regularly	41 – 58	49	52
Field or livestock records complete and accessible to unit managers	52 – 70	60	52
Key performance measures (ratios) reviewed at least annually	17 – 38	27	43
Policies for owner investments and withdrawals defined and followed	7 – 26	18	21
Policies for dividing earnings (owners vs labor/mgmt) clearly defined	9 – 37	24	21
Capital Investment Analysis tools understood & accessible	25 – 49	34	39
Partial Budget techniques understood and utilized regularly	29 – 48	39	33

ONLY 1/2 do cashflow budgets & track profit/cost centers
…1/4 track key ratios
< 1/5 have policy for dividing earnings & withdrawing capital

Survey Results
Percent Adoption of Key Farm Management Proficiencies

Marketing and Risk Management Proficiencies	TEPAP Participants	AVE	2014
Inventory to market is defined well in advance of marketing	56 – 80	69	73
Market Targets are established based on known Break Even Point, Cost of Production, & Cash Flow requirements	44 – 75	57	59
Forward contracts, hedging, and option tools are understood & utilized regularly	54 – 75	67	82
Crop Insurance provides balanced protection-hail, fire, all risk	67 – 96	81	86
Liability insurance covers balance of risks – liability, health, environmental exposures	79 – 95	86	89

Almost 1/2 market production with no idea of production cost!

"Would you loan money or invest in an industry that gets a flunking grade in core management proficiencies?"

If you don't like your grade… Guidebook for Sale!!!

- Developed after 25 years of consulting
- 256 page guidebook
- CD with working templates to facilitate implementation

M. I. S. Hierarchy

Audience

Tax Reporting
- Cash-Basis Net Income

IRS, Provincial Tax Entity – Minimum Requirement

External Financial Reporting
- Accrual Basis Inc Stmts
- Cost/Mkt Value Bal Sheets
- CDRC Analysis

Investors & Owners Lenders

Managerial Reporting
- Ties financial and physical units together
- Profit & Cost Centers
- Focus on Cost Production
- Integrates Financial & Economic Analysis

Responsibility Segment Managers – crop production, marketing, equipment support, etc.

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Key Question for the Farm Manager:

"How can managerial accounting be used to measure the impact of *strategic decisions*?"

5 Steps to Strategic Management

- **Step #1** – Analyze costs and activity in each management activity center
- **Step #2** – Identify strategies that influence performance
- **Step #3** – Simulate impact of alternative strategic decisions
- **Step #4** – Implement high impact strategic options
- **Step #5** – Measure the impact of decisions made

Strategic Options – ***Revenue Enhancement***

- Adopt technology to improve yields
- Marketing options to maximize price
  - Value-added
  - Non-GMO's vs GMO
  - Organics, natural, antibiotic free, "sun fed"
- Off-farm supplementation
- Custom services to utilize underemployed assets, fixed overhead
- Lobby for *more government support!*

Strategic Options - ***Cost Management***

- Strategic alliances/joint ventures
- Precision Farming
- Direct Seeding/NoTill
- Optimizing buy, lease, custom hire decisions
- Feed implants
- GMO crops
- Pre-pricing key inputs
- Optimizing in-sourced vs. out-sourced services
- Growth/OH Cost dilution

"We learn by Doing..." **CDS Test Drive of Management Accounting Standards**

- RME Grant ('02-03): 30 growers in peer group following *similar practices*
- **Goals:**
  - Learn MA concepts/benefits
  - Design MA system to fit how business is managed (segments)
  - Identify cost of production
  - Build benchmarking model
  - Optimize strategic decisions

Expected OUTCOMES from Direct Seeding

- Reduced operating costs
- Increased operating margins
- Improved environmental quality
- Improved capital asset use efficiency—less capital required per acre
- Ultimate Target: Higher Return on Equity

Key Questions:
1. Can we measure impact of strategic decisions?
2. Are we making progress?

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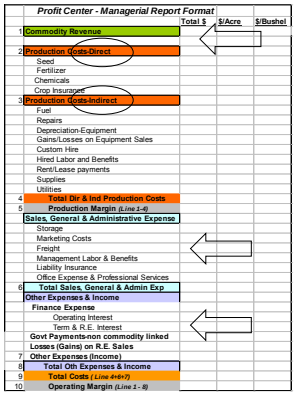
1st task – Re-think how to organize data

→Standardized profit center format

Recommended by Farm Financial Standards Council



	1996-98	1999	2000	2001
Direct Production Costs	$93.03 $1.29	$82.21 $1.14	$98.88 $1.11	$107.84 $1.20
Indirect Production Costs	$92.74 $1.28	$85.12 $1.18	$97.48 $1.10	$96.78 $1.08
	Production Costs dropped $.29/bu –12%			
Sales, General & Admin Costs	$39.61 $.54	$21.83 $.30	$30.84 $.35	$25.42 $.28
	SG & A Costs dropped $.26/bu –48%			
Finance Costs	$15.93 $.22	$10.12 $.14	$9.06 $.10	$6.36 $.07
	Finance Costs dropped $.15/bu – 68%			
Total Costs	$241.31 $3.31	$199.28 $2.77	$236.26 $2.65	$236.40 $2.63
	Total Costs dropped $.68/bu –21%			
Yield Bushel/Acre	73.6	72.0	88.1	90.0

Five Critical Performance Areas – Originally "Sweet 16" →Now "Legal 21"

- Liquidity
- Solvency
- Profitability
- Repayment Capacity
- Financial Efficiency

Need to get familiar with "High 5"

1 Liquidity

Measures ability of farm business to meet obligations as they come due.

Expressed As Two Measures:

1) **Working Capital** = Current Assets – Current Liabilities

2) **Current Ratio** = Current Farm Assets / Current Farm Liabilities

2 Solvency

Measures ability to repay indebtedness, withstand risk, and continue operations after financial adversity.

Three Measures *(only need one)*: *TEPAP Median =* '03 = .36; '04 = .33; '05 = .49; '06 = .40; '07 = .40; '08 =

1) **Debt Asset Ratio** = Total Farm Liabilities / Total Farm Assets

2) **Equity to Asset Ratio** = Total Farm Equity / Total Farm Assets

3) **Debt/Equity Ratio** = Total Farm Liabilities / Total Farm Equity
(aka Leverage Ratio)

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3 Profitability Measures

Measures ability of farm business to generate a profit as well as a return on assets and equity

Four Measures:

1) Net Farm Income (NFI) =
Revenue – Expenses + Gains/Losses
(must be Accrual Based to be meaningful)

2) Operating Profit Margin Ratio (OPM) =

(Net Farm Inc from Oprns + Int Exp – Value of Unpaid Labor/Mgmt)
Gross Revenue

Median OPM = 12%; 20%; 16.5%; 14.9%; 10.6%

Profitability Measures – cont'd

TEPAP Median = 6.9%; 5.9%; 7.6%; 9.6%; 7.0%; ____

3) Return on Assets (ROA) =

(Net Farm Inc Oprns + Farm Int Exp – Value of Unpaid Labor/Mgmt)
Average Farm Assets

TEPAP Median = 7.4%; 8.0%; 8.4%; 9.8%; 8.9%; ____

4) Return on Equity (ROE) =

(Net Farm Inc from Operations – Value of Unpaid Labor/Mgmt)
Average Total Farm Equity

4 Repayment Capacity

Measures ability to service debt and lease obligations and replace capital

Three Measurement Indicators:

1) Term Debt & Capital Lease (Coverage) Ratio =

(Net Farm Income Oprns + Non-farm Inc + Deprec + Int Exp on Term & Capital Leases – Inc Tax Expense – Family Living WD)
Principal & Interest on Term Debt and Capital Leases

2) Capital Replacement and Term Debt Repayment Margin =
Capacity - Commitments

Capacity = NFIFO + Non-Farm Inc + Depr – Inc Tax – Family WD
Commitments = Principal Pmts on Term Debt and Capital Leases

3) Debt/Income Ratio = Ave Total Liabilities / NFIFO

1 Financial Efficiency Measures

Measures individual aspects of operating performance that impact overall financial performance

Three Measurement Areas:

1. **Asset Turnover Ratio (ATR)** ←*Key Performance Indicator*
2. **Four Operating Ratios**
   a. Operating Expense Ratio = T F Op Exp/Gross Farm Rev
   b. Depreciation Expense Ratio = Dep Exp/GFR
   c. Interest Expense Ratio = Int Exp/GFR
   d. N F I from Operations Ratio = NFIFO/GFR
3. **Labor and Equipment Productivity Ratios**
   a. Gross Farm Revenue per Full Time Family Supported
   b. GFR / Investment in Machinery & Equipment
   c. GFR / (Labor + Salary + Unpaid Family & Management)

Financial Efficiency Measures

Asset Turnover (ATR)

Measures how efficiently a farm's assets are being used to generate revenue.

Median = .63:1; .49:1; .55:1; .36:1; .35:1

Expressed as:

Asset Turnover Ratio (ATR) = Total Revenue / Average Total Assets

Q1. Can these numbers be benchmarked?
Q2. What is your #, how has it changed and why?

Making the Connection - Dupont Model to Managerial Accounting

- Financial ratio analysis provides "whole farm business" perspective
- DuPont Model provides analytical "branches" for managerial accounting to go to next level
  - Leads to responsibility center analysis
  - Focuses on key drivers of financial performance
  - Answers more clearly "cause-effect" of strategic & operating decisions

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DuPont Model – *Looks @ Big Picture & Inter-Relationships*

- Developed early 1900s at DuPont
- Shows how bottom line performance (ROA & ROE) affected by **key drivers**:
  - Asset Use Efficiency (Turnover Ratio)
  - Operating Efficiency (Operating Profit Margin)
  - Financial Leverage (Assets to Equity Ratio)

DuPont Model – ROA Drivers

(Asset Turnover Ratio)* x (OPM Ratio) = Return on Assets**

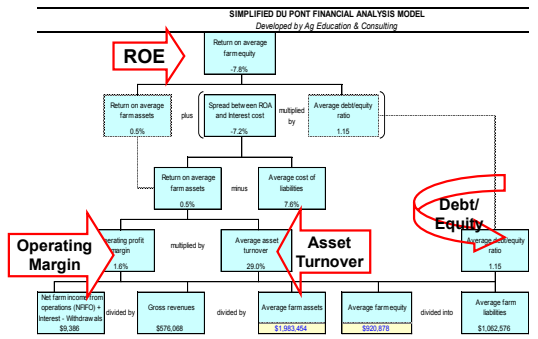
*Gross Farm Revenue / Ave Farm Assets x **Net Farm Inc / Gross Farm Revenue = ROA

DuPont Model – ROE Drivers

ROE = Profitability x Asset Efficiency x Leverage Ratio

= Op Profit Margin x Asset Turnover x Assets/Equity Ratio

NFI / Equity = NFI / GFRevenue x GF Revenue / Farm Assets x Farm Assets / Equity



"Every Strategic Decision impacts financial performance…"

A Tale of Two Tillage Systems

	Conventional	Direct Seed/NT
ATR*	.50	1.05
OPMR	.1275	.1633
ROA	6.47%	17.14%
ROE	3.88%	22.61%

**** Fundamental change occurred in ability to generate revenue with a finite amount of capital assets.***

DuPont Simulation Case Study

Refer to Handout (& next slide)

Part I – Base Case vs. Impacts of alternative strategic moves

Part II – Base Case vs. Impact of alternative dairy strategic actions

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What's better... grow? Or reduce costs?

Dupont Model – Simulation Exercise

Review Cases A – D; test data

Test Alternative Strategies

1. **Identify strategic shift**
2. **Develop $ changes in operation**
3. **Enter revised $ compared to baseline (Case A)**
4. **Record data changes and revised ratios on worksheet.**

Data Set	Case A	Case B	Case C	Case D
Revenue	$776,000	$853,600		
Var Oper Costs	499,000	548,900		
Fixed Op Cost	95,000			
Interest Costs	78,000			
Net Farm Income	104,000			
Labor/Mgmt W/D	60,000			
Average Assets	1,800,000			
Ave Liabilities	1,000,000			
Average Equity	800,000			
OPM	15.7%	17.5%		
ATR	43.1%	47.4%		
ROA	6.8%	8.3%		
ROE	5.5%	9.0%		

Case A – Baseline data - grain and livestock operation

Case B – Grow 10% (assume unused capital and mgmt) Revenue & variable operating costs go **up 10%.**

Case C – Increase cost efficiency by 10%. Operating costs decrease $49,900.

Case D – Reduced assets to produce same revenue. Example: Share ownership of drill & power unit. Financial impacts: Assets & debts -$200,000; Depreciation -$10,000 (Fixed Costs), Variable Oper Costs -$4,000, Interest Costs -$14,000

..\..\Sheet\Financial Models\Dupont files\Du PontCentrec-RLW Case Examples.xls

Partial Budget Analysis

New Template for Case Study!

Partial Budget Link

Strategic shifts to simulate

- Merge two farms together. Retire unnecessary management/other duplicative costs
- Two geographically dispersed farms agree to jointly own a combine; guarantee a minimum of 500 hours; sell old combine and co-purchase a machine with an annual rollover trade.
- Simulate worst case scenario based on a strong likelihood that a drought (or price drop) will reduce production by 35%. Assume variable costs can be cut by 10% (i.e. top dress fertilizer, harvest, storage and trucking costs); management/labor can take a 20% cut.
- Sell a major capital asset (i.e. power unit or combine) and lease the machine on an hourly basis. Assume annual usage is 175 hours.
- Invest in technology: portable scale to cut hauling costs, shipping shrink; Precision Ag fertilizer injection system; RTK guidance system
- Switch from custom hauling to owner operated truck & trailers at $120,000/unit
- Switch from custom hiring baling of big square bales to own/operate: 225HP tractor @$150,000; $80,000 baler; 10,000 tons baled annually
- Implement a value added marketing scheme (grass fat cattle)...incr variable costs, reduced quantity; annual audit & certification costs; 15% annual premium over generic commodity
- Debt restructuring to lock in lower interest rates; amortize pre-payment penalty 7 years
- Several cattle producers join in alliance to sort, ship and feed out: achieve hauling & pen feeding efficiency; market premiums for "size and breed uniformity"

Oregon Rancher DuPont Simulation

Financial Ratio Comparison

	Current	900 Cow	650 Cow	450 Cow
ROE	0.7%	3.5%	2.5%	5.4%
ROA	0.7%	3.2%	2.3%	4.3%
OPM	4.3%	18.3%	10.4%	15.5%
AT	15.6%	17.4%	22.2%	27.9%

Major benefits from MA

- Identifies UCOP
- Allows analysis of activity by center and provides basis for evaluation performance of center managers
- Helps isolate changes in management behavior that will improve business performance
- Enables real-time WIP and inventory valuation system → monthly financials more useful for managements interpretation...compared to *cash to accrual practice.*

Monthly Records Using Cash Accounting during year + Year End Accrual Adjustment

Month	Monthly Net Income	Year to Date Net Income	YTD NI as % of Tot Yr NI	Month End Net Worth	% Change from Beg NW
Beg of Yr				$ 376,334	
January	$ 22,419	$ 22,419	23.6%	$ 398,753	6.0%
February	$ 25,205	$ 47,624	50.1%	$ 421,959	12.1%
March	$ (28,781)	$ 18,843	19.8%	$ 393,177	4.5%
April	$ (132,953)	$ (114,111)	-120.1%	$ 211,298	-43.9%
May	$ (14,732)	$ (128,842)	-135.6%	$ 196,566	-47.8%
June	$ (81,326)	$ (210,168)	-221.2%	$ 115,240	-69.4%
July	$ (27,570	$ (237,738)	-250.2%	$ 87,670	-76.7%
August	$ 112,079	$ (125,659)	-132.3%	$ 199,749	-46.9%
September	$ 151,387	$ 25,727	27.1%	$ 351,136	-6.7%
October	$ 6,135	$ 31,862	33.5%	$ 357,271	-5.1%
November	$ (230,138)	$ (198,276)	-208.7%	$ 122,133	-67.5%
December	$ 293,283	$ 95,007	100.0%	$ 474,453	26.1%

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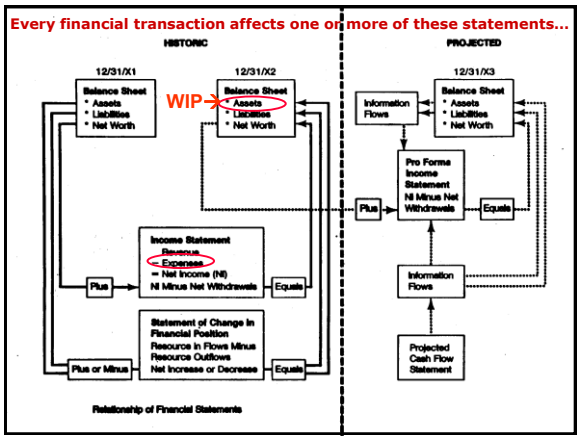

Tax vs. Economic Depreciation

- FFSC Prior Position:
  Tax depreciation for most operations does not present a material distortion of depreciation cost and can be used as proxy for cost based income analysis
- Current Problem: Accelerated write-offs can distort real depreciation expense
  - Section 179 – added write off $25,000
  - Special Depreciation Allowance – new equipment
- Proposal:
  If tax depreciation differs significantly, cost based analysis should use "book" instead of "tax" depreciation

Impact on Accrual Net Income – Using Tax vs Book (Economic) Depreciation

- **Survey of annual TEPAP participants**
  - Approximately 5% of class is doing both tax and book
  - Few assess impact on accrual net income – most participants who completed trend sheet used tax depreciation
- **% Error in Accrual Net Income**

Year	2009	2010	2011	2012	2013
Operating Expenses (000's)	$1,988	$2,098	$2,292	$2,657	$3,069
Tax less Book Depr adjmt	$244	$148	($9)	$62	$339
Depr Adjmt as % Oper Exp	12.2%	7.1%	(0.4%)	2.3%	11.0%
Depr Adjmt as % Net Inc	32.7%	17.6%	(0.7%)	7.3%	85.6%

How Do We Implement Managerial Reporting?

- Learn core concepts of managerial accounting
- Standardize definitions and methodology
- Work through case study applications
- "Test drive" concepts in your business

Six Core Concepts of MA

1. Requires **cost-based, accrual accounting**
2. Uses **responsibility centers** (manageable segments) for accumulating and summarizing transactions
3. Integrates **production** factors and **financial measurements** (i.e. /cwt, /bu)

Core Concepts (cont'd)

4. Core transactional information is accumulated, then supplemented with economic analysis
5. Follows GAAP, commercial industry practice, multi-commodity applicability
6. Must accommodate multiple period production cycles – (crop, livestock, perennials)

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Implementation Issues

- Accounting versus economic analysis
- Identifying manageable segments
- Profit/Cost center report formats
- Handling unusual transactions – cost recovery, revenue adjustments
- Definitions: direct vs indirect; variable vs fixed
- Integrating financial and physical quantities ($, bu, acres, employees)
- Transfer pricing
- Alternatives for allocating indirect costs/overhead
- Other technical issues
  - Inventory valuations
  - Equipment gains/losses
  - Tax vs book depreciation
- Case studies

Definitions & Terminology

- Analysis Types
  - cash
  - accrual
  - economic (opportunity cost)
- Unit Cost of Production
- Costs:
  - direct vs indirect
  - variable vs fixed
- Unusual transactions – Is it a revenue, cost, revenue adjustment, or cost adjustment?

Unit Cost of Production

- Key focus:
  - Shows total costs that have to be covered
  - Defines minimum price needed from marketplace to achieve profit targets
  - Three key measurements
    - total $
    - $/base unit of production (acre, head)
    - $/unit of production (bu, #)

Definitions – Cost Categories

Depends on behavior of cost and what drivers affect cost changes

- Direct Cost – cost item identified with a single cost object in economically feasible manner
- Indirect Cost – cost item common to two or more cost objects and cannot be identified specifically with any one item

"Cost" versus "Expense"

- Cost is associated with building an asset value (inventoriable or capitalizable)
- Expense doesn't "build value"
  - Examples
    - Period Expenses: Interest expense, marketing costs, transportation, professional fees

Deciding Centers to Track

- Management intent determines if responsibility center is profit center or cost center
  - Look at management's objective – for profit?... or cost of doing business?
  - Management behavior expected of center manager
  - Threshold of activity must make it worthwhile to track performance
- Examples: are these a profit center or cost center?
  - Hay or corn production activity?
  - Custom trucking or fertilizing?

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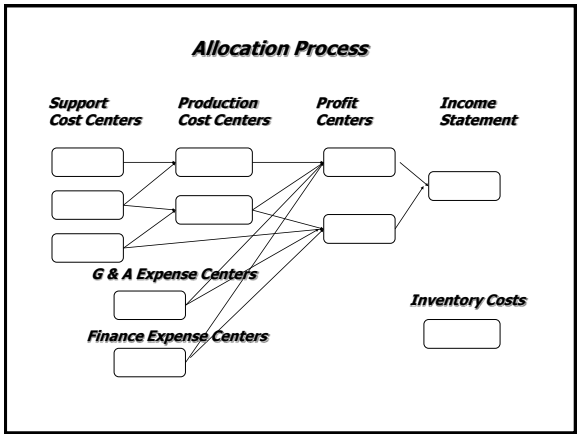
Center Types

- Production (production stages, activity sequences)
- Support operations
- Sales, general and administrative (SG&A)
- Financing



Allocation Procedures

- Define objective and measurable manner in which one cost center supports another cost or profit center
- Ultimately, all cost centers are allocated to profit centers
- Keep product costs and period expenses separate
- Do not allocate SG&A and Financing to production focused cost centers—these are period costs that should not be capitalized in inventory

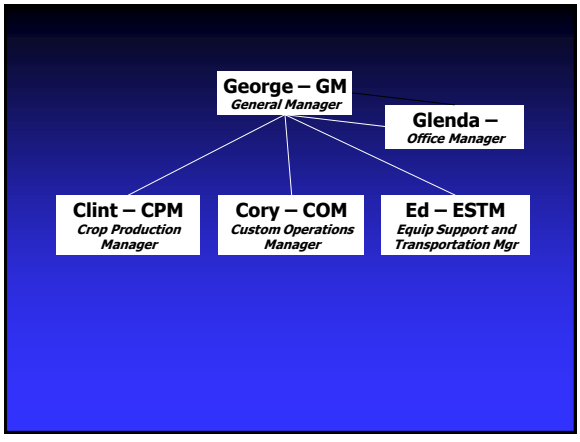
Spread-N-Grow *Case Study**

** 1 of 4 FFSC Case Studies*

- **Goal**: Design profit, cost and support centers for diversified farm with custom enterprise
- Unique features:
  - Multiple crop enterprises + custom operation
  - Distinctly separate accountability roles
  - All managers desire improved information
  - Matches management accounting system to management structure of business

Operational Data

- 6,000 acre diversified farm – wheat, barley, and canola under direct seed tillage program
- Gross revenue = $1,350,000 (3 yr ave.)
- Custom seeds 2,500 acres @$25/acre
- Custom fertilizes 5,000 acres - $300,000 revenue from application and fertilizer sales



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Case Solution

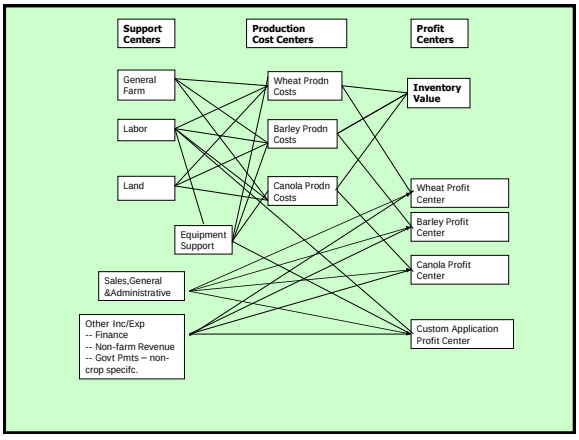
- Task #1 – Define profit centers
- Task #2 – Define cost centers and accounts that would normally have activity in each center
- Task #3 – Define allocation methodology and sequence for linking various cost centers

Profit Centers

- Decided on four profit centers
  - Wheat
  - Barley
  - Canola
  - Custom Application
- Ruled out custom trucking – not significant activity nor managed "for profit"

Cost/Expense Centers

- Production Cost Centers – set up one for each crop enterprise to accumulate work-in-progress (WIP) costs
- Support Cost Centers
  - Equipment Support
  - Labor
  - General Farm
  - Land Cost Center
- SG&A & Finance Expense Centers



Production Cost Center

Report Design (same for Wheat, Canola, Barley)

Revenue/Cost Recovery

- Grain by-products, straw

Production Costs

Direct Costs

- Seed
- Fertilizer
- Chemicals
- Crop Insurance

Indirect Costs

- Costs Allocated from *General Farm Overhead Center*
- Costs Allocated from *Equipment Support Center*
- Costs allocated from *Labor Support Center*
- Costs allocated from *Land Cost Center*

Colton farm charts –2013 Art charts

General Farm Overhead Cost Center

Report Design

Revenue/Cost Recovery

- Coop Dividends – Supplies

Production Costs

Direct Costs

- Labor and Benefits *(include here or in separate Cost Center?)*
- Utilities
- Supplies
- Fuel – *(non-farm related, i.e. boss's pickup, wives and kids)*

Indirect Costs

- *No transactions likely to come as indirect allocation to GFO*

Allocation Criteria

Allocate to Wheat, Barley, Canola, & Custom Application

Use a two-step staging of allocation rules:

1. Allocate between custom application and grain
2. Allocate portion going to each grain crop by pro rata share of acres in each crop

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Question – "How has inflation in machinery costs over last 10 years affected my cost of production?"

Equipment Support Cost Center

Great report for peer comparisons!

Revenue/Cost Recovery
- Gains (Losses) on Equipment Sales
- Custom Trucking Income

Production Costs

Direct Costs
- Fuel
- Repairs
- Depreciation (Mach & Equip)
- Property Taxes (Equipment)
- Custom Equipment Hire
- Equipment Rental Expense

Indirect Costs
- General Farm Overhead (allocated from GFO Cost Center)
- Labor (allocated from Labor Center)

Allocation Options:
Use standard rate for assigning costs to custom farming; allocate balance of costs to crop enterprises on pro rata basis

Meet Derek Schafer

Innovative finance savvy – TEPAP alum – dryland WA farmer - SWW 45bu; share combines w/cousin ID

Production Cost & Margin Trends	2013	2012	2008	2005
Tot Variable Costs	$5.65	$5.85	$4.11	$2.88
Total Fixed Costs	$1.37	$1.37	$1.20	$1.07
Breakeven Price – All Costs	$7.02	$7.22	$5.31	$3.95
Average Market Price	$7.00	$8.60	$6.50	$4.02
Operating Margin	-0.3%	20%	22%	2%
Nine Year Change Cost/Bu:	*Variable = +96%*		*Fixed = +28%*	

Strategies to survive? '04-13 Ent Bgts

Land Cost Center*

Revenue/Cost Recovery
- Gains (losses) on sale of real estate
- Land rental income
- Fixed government payments – base related

Operating Costs
- Cash Rent
- Repairs Costs – Building & Improvements
- Real estate taxes
- Fire & Liability insurance – Fixed Improvements
- Professional fees – land management fees, lease renewal fees and transaction costs
- Property management fees

Allocation Method: Allocate to crop production cost centers based on % of farm in each crop

*** Controversial concept still being debated**

Profit Center Report Design – Wheat*

Revenue	
Commodity Revenue	$xx,000
Protein Premiums	$xx,000
LDP's-CCC	$xx,000
Production Costs	$xx,000
Production Margin	$xx,000
SG&A – Allocated from SG&A cost center	$xx,000
Finance – Allocated from Finance cost center	$xx,000
Other Income & Expense	$xx,000
Profit Margin	$xx,000

Same Format for Barley and Canola Profit Centers

Custom Application Profit Center

Revenue	
Custom Seeding Income	$xx,000
Custom Fertilizer Sales	$xx,000
Production Expenses	$xx,000
Direct	
Custom License Fees	$xx,000
Cost of Fertilizer Resold	$xx,000
Indirect	
Gen Farm Overhead *(allocated from GFOH center)*	**$xx,000**
Equipment *(allocated from Equipment Cost Center)*	**$xx,000**
Labor *(allocated from Labor Support center)*	**$xx,000**
SG & A - allocated	$xx,000
Finance – allocated	$xx,000
Net Profit – Custom Application	**$xx,000**

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Attributes of a Transaction

Bare Minimums

- Memo description
- Date
- Transaction number
- Vendor/Customer
- Account Assignment
- $ Amount

Higher End Programs

- Units or Quantity
- Responsibility Center
  - Profit Center
  - Cost Center
- Production Year
- Production Center

Handling Unusual Transactions

- Proper handling of initial transaction is key to basic integrity of management accounting system
- Is transaction revenue, cost, revenue adjustment, or cost adjustment?
- Examples:
  - Review Shoe Box Case Study – illustration of difference between Financial and Management Reporting
    - Refer to Handout
  - "Handling Unusual Transactions" (see MA Standards)
    - **Transactions Worksheet** TRANS WKSHT 2014
    - Discuss Case #4 – beef slaughtered for employees

Transaction Detail Needed for Tax Reporting, MA and Agronomy Mgmt – *The Integration Challenge*

Basic Transaction Data to file a Tax Return

- Date
- Bank account affected
- Vendor/customer name
- Transaction no.
- Account assignment (asset, liability, equity; income, expense)
- Amount
- Memo/Notation

Additional Data needed for Unit Cost of Production (UCOP) & Mgmt Acctg Reporting

- Units/Quantity
- Responsibility Center
  - Cost Center; Profit Centers
- Production Year
  - As separate field
  - Use date range to select
- Production Center/Location

Agronomic/Livestock Data

- Soil types & tests
- Prescriptions-VRA maps
- Crop input records
- Field activity records
- FSA compliance info (acres, owners, shares, farm- tract-Fd#, legal descriptions/location
- Crop Insurance/RMA
- Inventory management and storage; grade attributes by commodity
- CCC loan information
- Pasture treatments /AUM use

Case Illustrations – Unusual Transactions

- Case A – Equipment Rental Income
- Case B – Custom apply & re-sell fertilizer
- Case C – Sell surplus machinery repair parts
- Case D – Receive Yr-End Quantity Discount
- Case E – State/Federal fuel tax refunds
- Case F – Sale of raised wheat for seed
- Case G – Custom haul grain for neighbor

Unusual Transactions - Case Studies (cont'd)

- Case H – Government payments, conservation cost share reimbursements
- Case I – Reimbursement from landlord
- Case J – Sale of excess hay to neighbor
- Case K – Sale of cull cows
- Case L – Receipt of crop insurance proceeds
- Case M – Treatment of equip sale gain/loss
- Case N – Income from commodity by-product

What is ***Transfer Pricing?***

- Situations where it's an issue
  - Inter-entity transactions
  - Enterprises transfers – costs & revenues
  - Examples
    - Raised grain fed to cattle enterprise
    - Raised grain used for seed
    - Rental house used for farm laborer
    - Beef provided to employees
- Price/SOP to use when transferring cost
  - Arms length pricing?
  - Cost or market value?
- Importance of consistency when recording entries

Case Study: MA-Transfer Pricing Exampes.xls

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Results from Teaching Exposures

- Concept is complex…but teachable
- Revived interest – Financial Ratio Analysis, particularly:
  - OPM, ATR, ROA & ROE
- Growers have actually completed template worksheets for the Profit and Cost Centers; many others "working on it"
- General consensus: Producers need to master MA, but HUGE learning/implementation curve
- Primary Motivator - "Fear factor" … growers may lose competitive edge if they can't get this figured out

Conclusion #1 – Implementation is bigger job than most realize

- Few have skills or experience to implement
  - Accrual understanding; cost vs. market values
  - Ratio analysis
  - "Whole Farm" Financial analysis skills primitive; segment level even more challenging
- Full implementation will likely involve
  - Developing skilled CFO (internal or outsourced)
  - Major change in accounting software design & implementation

#2 Conclusion – MA design needs to mirror business management structure

- MA core premise: desire to measure performance by manageable segment
- Grower attempts to implement MA expose poorly delineated accountability
- MA provides a "teachable moment" for re-evaluating personnel management

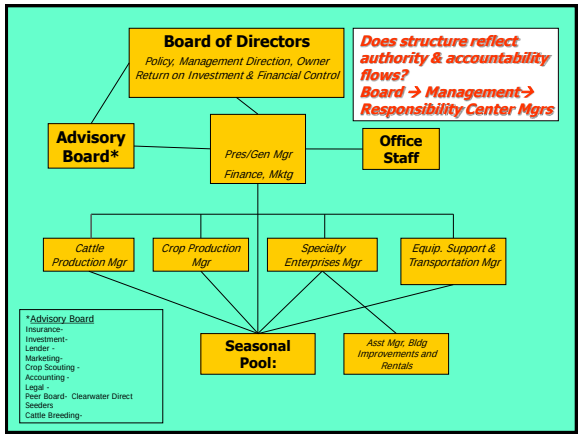
(see Organization Chart & Center Design)

3 Questions:

- Are roles divided?
- Is reporting and accountability structure defined?
  - Employees, management and board
- Do key members have written job descriptions?

40% have this in place

Responsibility Center Managers



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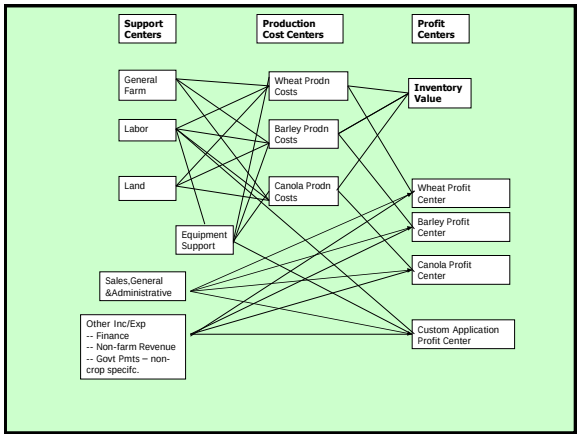
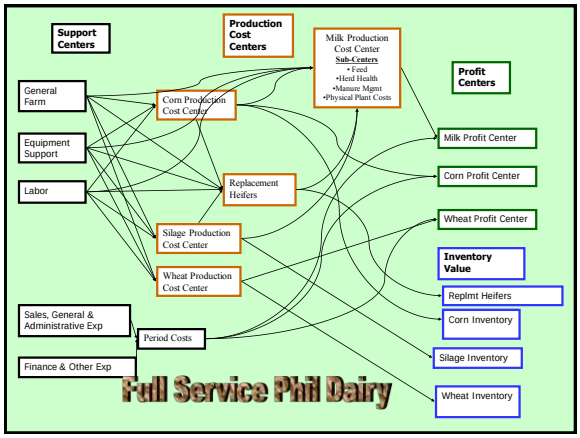


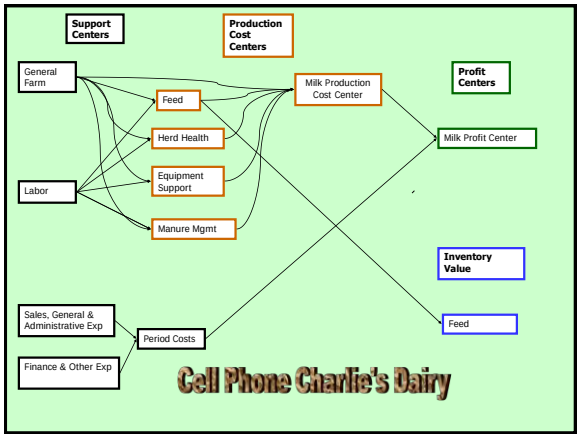
FFSC goal: Expand application models for other Ag Industries…

MA Center Designs for DAIRY

Two Extreme Cases:

- Full Service Phil
- Cell Phone Charlie





What is the significance of the "boxes" in the MA flowchart?

- Points out areas where management is focused
- Points to foundation for making strategic shifts or staying the course

…will do case study on this later

CASE STUDY

Design MA Responsibility Center Flowchart for Your Operation

- ❑Organization Chart
- ❑MA Flowchart
- ❑ …see examples of previous workshops

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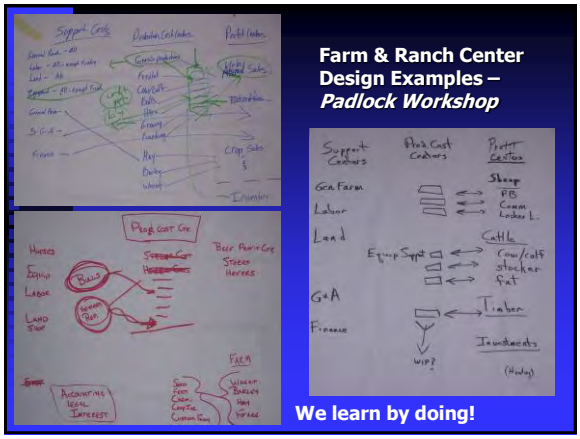

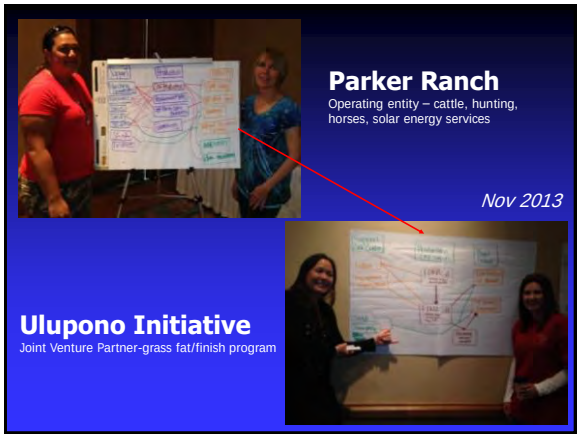

#3 Conclusion – Peer Group Benchmarking is Secondary Benefit of MA

- Benchmarking billed as key reason for MA
- Loses importance once get into process
  - Too many variations in structure, enterprises, and methods of operation
- REAL VALUE: comparison of current to past trends in same operation ... and how strategic shifts can enhance performance in the future.

Free download: 5-Year Trend Sheet
www.wittmanconsulting.com

Credible Applications

- Grain farms – FINBIN, State FBM Assns
- Dairy
  - Farm Credit East
  - Tarbet
- Hogs
  - John McNutt, Latta Harris
- Cattle, Specialty Crops – NWFCS
- Machinery dealers – Spader Group-JD

"...financial Data from 3,700 farms in 10 states... entered in compliance with FFSC Standards"


Dale Nordquist

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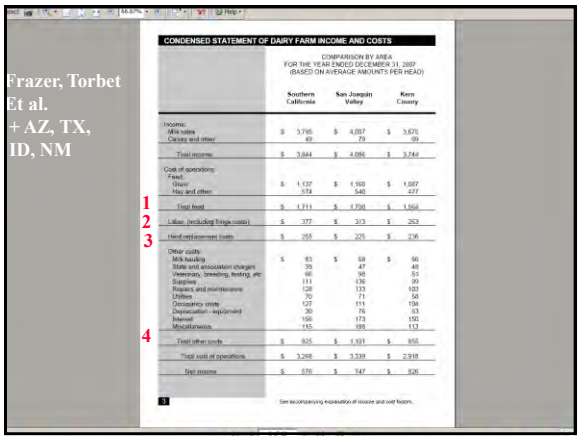
Frazer, Torbet Et al. + AZ, TX, ID, NM



CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

COMPARISON BY AREA
FOR THE YEAR ENDED DECEMBER 31, 2007
(BASED ON AVERAGE AMOUNTS PER HEAD)

	Southern California	San Joaquin Valley	Kern County
Income:			
Milk sales	$ 3,795	$ 4,087	$ 3,676
Calves and other	49	79	69
Total income	$ 3,844	$ 4,086	$ 3,744
Cost of operations:			
Feed:			
Grain	$ 1,137	$ 1,160	$ 1,087
Hay and other	574	540	477
1 Total feed	$ 1,711	$ 1,700	$ 1,564
2 Labor, (including fringe costs)	$ 377	$ 313	$ 253
3 Herd replacement costs	$ 255	$ 225	$ 236
Other costs:			
Milk hauling	$ 83	$ 68	$ 66
State and association charges	39	47	48
Veterinary, breeding, testing, etc	66	90	53
Supplies	111	136	99
Repairs and maintenance	128	133	103
Utilities	70	71	56
Occupancy costs	127	111	104
Depreciation - equipment	30	76	63
Interest	156	173	150
Miscellaneous	115	198	113
4 Total other costs	$ 925	$ 1,101	$ 855
Total cost of operations	$ 3,268	$ 3,339	$ 2,918
Net income	$ 576	$ 747	$ 826

3

See accompanying explanation of income and cost factors.

Factors in Assuring Integrity in Benchmarking Efforts

- Standardization in data base chart of accounts and structure
- Gatekeeper to assure consistency
- Knowing what data to benchmark and what NOT to benchmark
- Pitfalls in Benchmarking – *see discussion draft Pitfalls*

10 pitfalls in aggregating data for benchmarking

- Farm size diversity
- Commodity mix
- Farm organization, entity mix
- Owned vs leased land base
- Income recognition practices – deferred taxes, accrual vs cash
- Valuation methods
- Handling equity transactions – investments, draws, labor contributions
- Timing of statement dates
- Marketing practices – inventory build-ups
- Non-farm business activities & scope

#4-Cost Management is "land of opportunity"

- **Historical focus has been on revenue enhancement**
  - **Milked this cow 'til it is dry!**
  - **Government bailouts less helpful**
- **Big opportunities lie in managing costs – direct vs indirect (overhead)**
- **Segment analysis helps identify problems and opportunity areas …**

→ focus on bottom line doesn't tell much

Compensation Summary			Name:	Jody Owner-Operator	
			Year:	2000	
	Period	Rate/Mo		No Mos.	Yearly Total
Salary	Nov-Feb	$2,000	Base	12	$24,000.00
		Rate/Hr	Hrs/Mo		
Wages	Mar-Oct	$0.00	250	0	$0.00
	Cash Salary & Wages Subtotal:			*$24,000.00*	
Social Security Benefit - % Rate:			7.65%		$1,836.00
			Rate/Mo		
Housing			$1,000.00	12	$12,000.00
Utilities - Power, Phone,etc			$300.00	12	$3,600.00
Meal Allowance, Groceries			*270 days @ $6.00/day*		$1,620.00
Beef, Farm Produce			*1/2 beef - 350# @$1.40/lb*		$490.00
Other-			$0.00	12	$0.00
Medical Insurance			$450.00	12	$5,400.00
Uncovered Medical Reimbursement					$4,000.00
Other-					
Commuting Pickup					$3,000.00
Other- Auto Insurance, gas, maint.-			Spouse & children		$4,000.00
Other-					
Total Wage and Benefits Value (Items 1-7)					$55,946.00
Bonus- Based on Yearend Results					$2,500.00
Retirement Contribution @			7%		$1,680.00
Total Compensation:					$60,126.00

Total Hours Worked Per Year			2500
	(excl bonus & ret.)		(incl bonus/ret)
Total Compensation per Hour	$22.38	(line 8/line 11)	$24.05
Total Value of Non-Taxable Benefits (Items 4-7)			$34,110.00
Non-Taxable Benefit Analysis @ Tax Rate:		43.15%	30.15%
Pre-Tax Wage Equivalent (Line 12/(1-TaxRate)		$60,000	$48,833
Total Tax Savings (Line 13-Line 12)		$25,890	$14,723
Tot. Pre-Tax Wage Equivalent-(Line 8+Line 14)		$81,836	$70,669
" " " " " - Per Hour		$32.73	$28.27

→Are you giving your business $33/hour in labor value?

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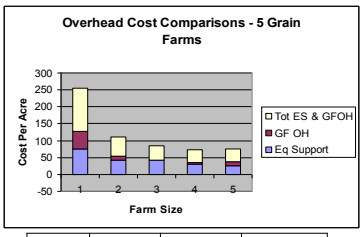


Farm Size	Equip Support	General Farm OH	Tot ES & GFOH
1123	74.95	52.17	127.12
2100	41.09	13.78	54.87
2198	42.57	-0.44	42.13
4013	30.27	5.89	36.16
4126	25.24	12.04	37.28

How do you stack up against your competitors?

Conclusion #5 – What CARROT motivates implementation of MA?

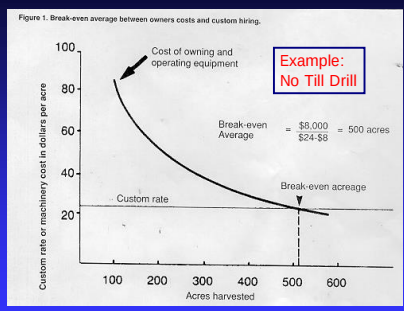
- ...not erotic satisfaction of doing cost and profit center reports!
- MA helps identify strategies to enhance performance in specific segments
- Challenge: *linking performance analysis* and *strategic management*

→ Dupont Model Simulation experience demonstrates this visually and vividly!!!

What would you do to get a $20,000 pay raise?

Common opportunity in cost management is optimizing the buy, lease, custom hire decision for capital equipment acquisitions.

Step 1. Determine BEP – Owning vs Custom Hiring



Let's examine a baler purchase analysis...

..\..\Sheet\Financial Models\Cap Investment Analysis\ABC-implements_power units.xls

This suggests we ask... "What is ABC about?"

MA-ABCs of Farming.ppt

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Net Present Value (Cost) of a $317,500 Combine Purchase

Year	Down Payment, Loan Payment	Interest Portion of Payment	Tax 1 Depreciation	Fixed and 2 Variable Costs	Book 3 Value	Salvage 4 Value	Balancing 5 Charge	Tax 6 Reduction	After-Tax 7 Cash Flow	Present 8 Value Factor	Present 8 Value of After-tax Cash Flow
0	$63,500	—	—	—	$317,500	—	—	—	$63,500	1.0000	$63,500
1	$61,782	$17,526	$145,617	$17,705	$171,883	—	—	$84,637	−$5,149	0.9646	−$4,967
2	$61,782	$14,472	$36,825	$17,705	$135,058	—	—	$31,144	$47,194	0.9304	$43,913
3	$61,782	$11,208	$26,933	$17,705	$108,125	—	—	$26,022	$52,416	0.8975	$47,044
4	$61,782	$7,716	$23,581	$17,705	$82,544	—	—	$21,585	$56,553	0.8657	$48,960
5	$61,782	$3,968	$23,581	$17,705	$58,963	$162,000	$32,457	−$11,289	−$71,244	0.8351	−$59,495
Total	$372,410	$54,912	$258,537	$88,525		$162,000	$32,457	$152,519			$139,954

University of Illinois –

Farmdoc website: FAST tools

Lease or Purchase?

Net Present Value (Cost) of a $317,500 Combine Lease

Year	Deposit or Lease Payment	Fixed and 1 Variable Costs	Tax 2 Reduction	After-Tax 3 Cash Flow	Present 4 Value Factor	Present 4 Value of After-Tax Cash Flow
0	$42,000	—	—	$42,000	1.0000	$42,000
1	$42,000	$17,705	$27,942	$31,763	0.9646	$30,639
2	$42,000	$17,705	$27,942	$31,763	0.9304	$29,554
3	$42,000	$17,705	$27,942	$31,763	0.8975	$28,509
4	$42,000	$17,705	$27,942	$31,763	0.8657	$27,498
5	—	$17,705	$27,942	−$10,237	0.8351	−$8,549
Total	$210,000	$88,525	$139,710	$88,525		$149,650

Source: November 2013 Successful Farming – John Dietz

Conclusion #6 - It's OK to be *Half Pregnant* in MA Implementation

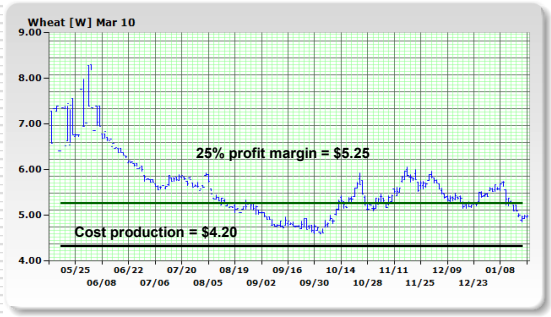
- Purists say MA is "all or none"…must drive to accumulating inventory costs on balance sheet. This IS ideal…but not only worthwhile goal.
- Considerable value in taking "baby steps"
  - Revisiting VALUE of ratio analysis
  - Preparing standardized cost & profit center reports
  - Differentiating direct and indirect costs; allocations
  - Accumulating direct costs in WIP
  - Isolating manageable segments that people manage
  - Handling unique transactions to insure integrity of managerial reporting output (see "15 STEPS" later on)

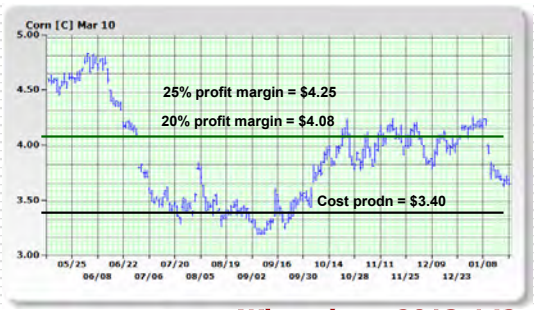
Conclusion #7 - Capture Periods for indirect cost accumulation and allocation will be huge obstacle for diversified growers & multi-year production cycles

- Corn/soybeans is fairly simple
- Operations with fall/spring crops, perennials, & livestock have tough challenge defining beginning and ending dates for transaction capture
- More complicated farms have most to gain from the process…if don't use MA, never get realistic cost of production data.
- CHALLENGE: Developing strategies to standardize implementation

Conclusion #8 – MA can change marketing management behaviors

- Helps identify cost of production
- Allows producers to set market price targets and execute marketing strategies tied to profit margin objectives
- Alternative: Market based on "hope"…
  - That selling price covers costs
  - That you hit market top





What about 2013-14?

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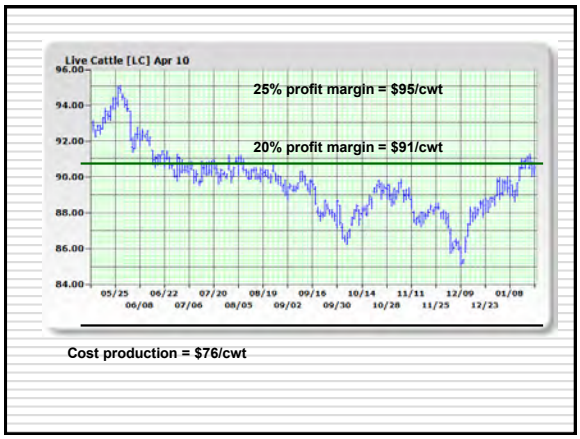

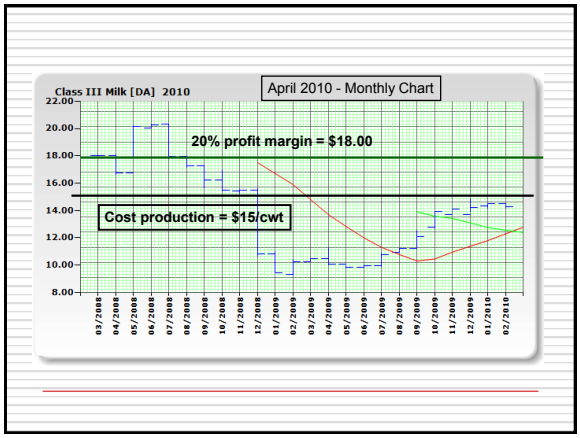

Conclusion #9 – Developing Adequate Computer Software Is Critical Component

- Software vendors actively engaged in MA debate…some more than others
  - Red Wing, FBS, AgManager, Quickbooks
- Producers will find most current software inadequate to do MA properly & efficiently
- ???? What are farmers using….

Accounting Software Users*

- 48% - Quickbooks and Quickbooks Pro
- 14% - Red Wing/Perception Acctg → ***Centerpoint***
- 6% - Farmworks
- 4% - Quicken, Famous
- 3% - Ag Base/AgriSolutions, Peachtree, Excel
- 2% - FBS Systems – *Norm Brown*
- 23% - 16 Other software systems

Can software generate management information beyond basic financial reporting?

**Based on TEPAP surveys 2003-2009*

Agronomy Software

- Farmworks-5
- JD APEX- 6/15
- EasiCrops/Ag Studio-3
- Conservis-1
- Ag Leader/SMS-6
- SST Toolbox
- FieldScripts – Climate Corp/Monsanto
- Mid-Tech Fieldware
- Solum – Granular

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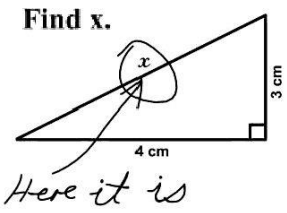
Major Differences – Enterprising vs. MA

- Enterprising built foundation for MA
- OK for investors, bankers & 1-horse management team...not Responsibility Center Managers
  - Investors & bankers concerned about "bottom line"
  - Managers concerned about responsibility areas
    - Goals, decision-roles, strategies, resources
    - Performance results, cost management

Can You Answer?

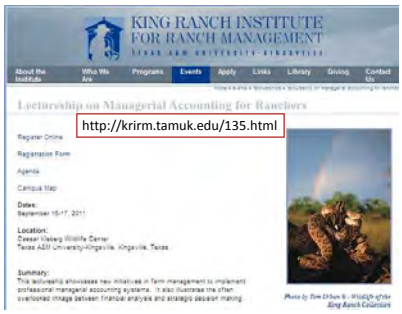
- What is cost/unit to produce each commodity?
- How have costs changed in last 5 years?
  - Direct inputs
  - Machinery, labor, other overhead
- How will new gov't policies impact me?
- What are key strategies that will be re-evaluated in next 1-5 years?

Finding answer not simple…



Summary: MA = *New Frontier in Farm Management*

- Complex, but teachable
- Adopters will have "competitive edge"
- Requires producers to "brush up" on basic financial management skills, first
- Will require major professional support + CFO skills to implement
- "New product opportunity" for professional services industry
- Will require endorsement, encouragement and funding from stakeholders interested in farm viability



Next workshop: July 7-8, 2014 Chicago
Co-sponsors: Top Producer & AAPEX

Time for Questions…

Management Accounting…*The "New Frontier"* in Farm Management

Reference material available:
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