Better Management through Basic Financial Analysis

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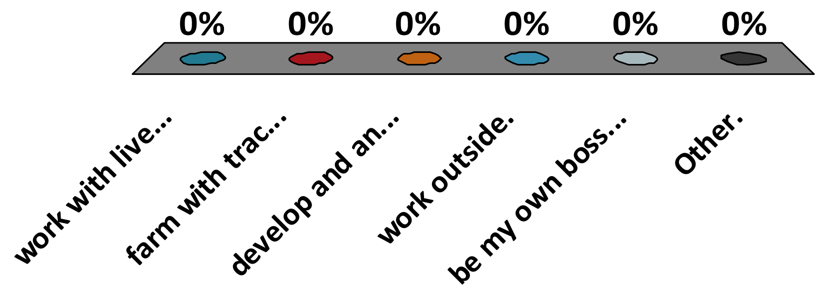
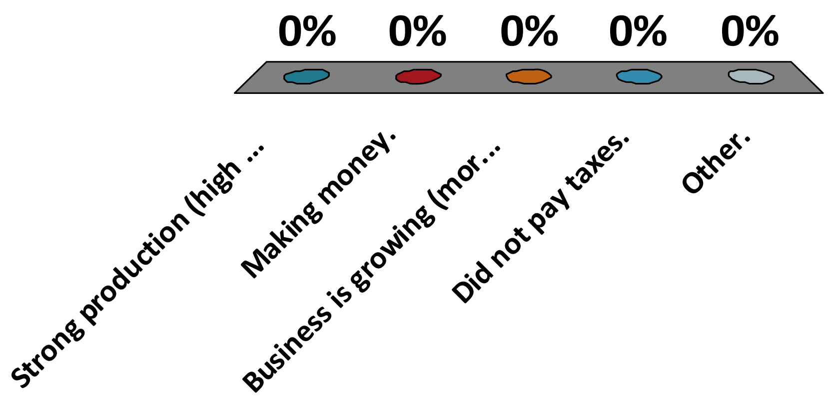
I work in an agricultural business because I love to…

1. work with livestock.
2. farm with tractors and equipment.
3. develop and analyze financial statements.
4. work outside.
5. be my own boss.
6. Other.



How would you define success in your business?

1. Strong production (high yields, weaning %).
2. Making money.
3. Business is growing (more assets, acres operated).
4. Did not pay taxes.
5. Other.



Where Are You?
(Are you healthy?)

- Medical Health
  - Blood Pressure
  - Temperature
  - Pulse
  - Respiratory Rate

- Financial Health
  - Liquidity
  - Profitability
  - Solvency
  - Financial Efficiency

Why do financial analysis

- To measure and identify the financial strengths and weaknesses of a business.
- To provide an "early warning system" of developing financial problems.
- To make comparisons with previous years, other similar operations and "rule of thumb" benchmarks.
- To assist managers in decision-making.
- To help lenders and other creditors evaluate credit risk when acquiring a loan.

What should I Measure?
Key indicators of financial health

- **Liquidity** – the ability of a business to meet short-term obligations.

Management Question Answered:

How well will I be able to pay all my bills without disrupting normal operations?

Symptoms of a Problem:

- Increasing carryover operating debt
- Selling productive assets to help pay bills
- Bills are not being paid on time

What Measures Should Be Used?

- Liquidity

Current Ratio

Working Capital

Liquidity Measure: Current Ratio

- Why Calculate: To determine if there is sufficient cash flow to meet all short term obligations (pay bills on time)

- How to Calculate:

Current Farm Assets ÷ Current Farm Liabilities

- Where to Find the Numbers: Balance Sheet

Liquidity Measure: Working Capital

- Why Calculate: To determine if there is sufficient cash flow to meet all short term obligations (pay bills on time)

- How to Calculate:

Current Farm Assets – Current Farm Liabilities

- Where to Find the Numbers: Balance Sheet

How Do I Evaluate My Ratio Calculations?

- **Benchmarks**
  - Rules of thumb!!!

Green indicates a strong measure (low risk)
Yellow indicates a stable measure (moderate risk)
Red indicates a weak measure (high risk)

Variations do occur!

How Do I Evaluate My Ratio Calculations?

- Liquidity Benchmarks
  - Current Ratio
  - Working Capital

Low Risk	Moderate Risk	High Risk
> 1.5	1.0–1.5	< 1.0

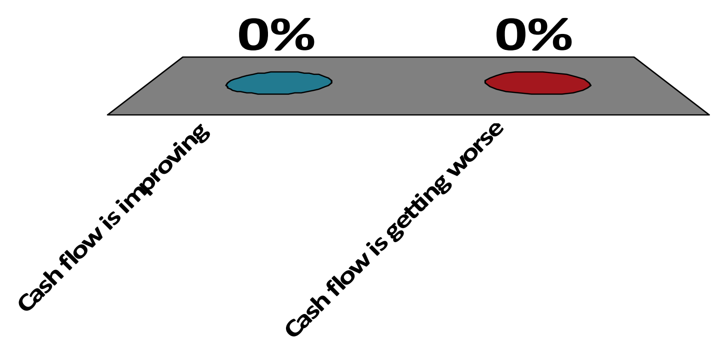
The appropriate level will vary primarily due to farm size.

Possible Actions For Improvement: Increase sales, decrease short term debt and other financial obligations, restructure debt to better reflect to current assets, evaluate a marketing plan to better time cash inflows and outflows.

What does this current ratio trend tell you?

Year 1	Year 2	Year 3	Year 4
5.01	4.69	2.22	2.21

1. Cash flow is improving
2. Cash flow is getting worse



What should I Measure?
Key indicators of financial health

- **Solvency** – the ability of a business to have enough assets to cover its liabilities.

Management Question Answered:
Can my farm financially survive a severe drought or two straight years of drought?

Symptoms of a Problem:
- Business has a difficult time withstanding any adversity
- Bank is reluctant to renew a loan
- Foreclosure and bankruptcy

What Measures Should Be Used?

- Solvency

Debt/Asset Ratio

Equity/Asset Ratio

Solvency Measure: Debt to Asset Ratio

- Why Calculate: To measure the long run ability of the farm business to pay all obligations and its ability to withstand adversity.
- How to Calculate:
  Total Farm Liabilities ÷ Total Farm Assets
- Where to Find the Numbers: Balance Sheet

Solvency Measure: Equity to Asset Ratio

- Why Calculate: To measure the owner's investment level in the business.

- How to Calculate:
  Total Farm Equity ÷ Total Farm Assets

- Where to Find the Numbers: Balance Sheet

How Do I Evaluate My Ratio Calculations?

- Solvency Benchmarks
  - Debt to Asset Ratio
  - Equity to Asset Ratio

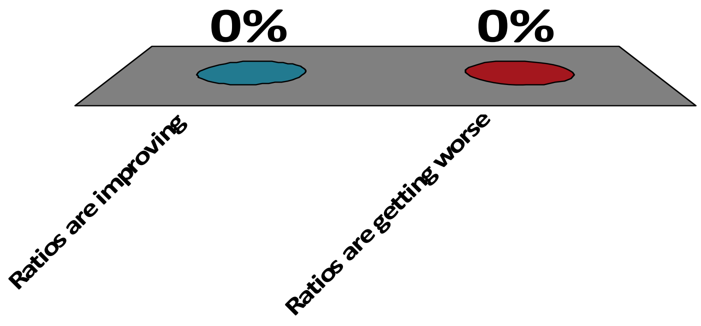
	Low Risk	Moderate Risk	High Risk
Debt to Asset Ratio	< 30%	30-70%	> 70%
Equity to Asset Ratio	> 70%	30-70%	< 30%

Possible Actions For Improvement: Increase operating profits, make additional principal payments on term debt, avoid unnecessary capital expenditures, reduce family living withdrawals.

What does this debt to asset ratio trend tell you?

Year 1	Year 2	Year 3	Year 4
0.62	0.41	0.21	0.18

1. Ratios are improving
2. Ratios are getting worse



What should I Measure? Key indicators of financial health

- **Profitability** – the ability of a business to generate earnings (profits) over a period of time.

Management Questions Answered:

How do my profits compare to similar operations?

How did my profits this year compare to last year?

Symptoms of a Problem:

- Increasing carryover operating debt
- Less money available for family living
- Net worth is decreasing

What Measures Should Be Used?

- Profitability

Rate of Return on Assets

Rate of Return on Equity

Profitability Measure: Rate of Return on Assets

- Why Calculate: To determine rate of return (earnings) compared to all resources used in the process (farm assets)
- How to Calculate:

Net Farm Income + Farm Interest – Value of Operator Labor & Management ÷ Average Farm Assets

- Where to Find the Numbers: Income Statement and Balance Sheet

Profitability Measure: Rate of Return on Equity

- Why Calculate: To determine rate of return (earnings) compared to owner resources used in the process (owner equity)
- How to Calculate:

Net Farm Income – Value of Operator Labor & Management ÷ Average Farm Net Worth

- Where to Find the Numbers: Income Statement and Balance Sheet

How Do I Evaluate My Ratio Calculations?

- Profitability Benchmarks

	Low Risk	Moderate Risk	High Risk
Rate of Return on Assets	> 5%	1–5%	< 1%
Rate of Return on Equity	> 10%	5–10%	< 5%

Possible Actions For Improvement: Increase the value of production, reduce production costs where prudent, control or reduce family living withdrawals, improve marketing practices, properly structure debt to revenue generation.

What should I Measure?
Key indicators of financial health

- **Financial Efficiency** – the ability of a business to utilize and combine the physical resources of your business in a profitable manner.

Management Questions Answered:

How efficient am I using my land and other assets to generate revenues?

Are my production costs too high?

Do I have too much debt for the amount of revenue I am generating?

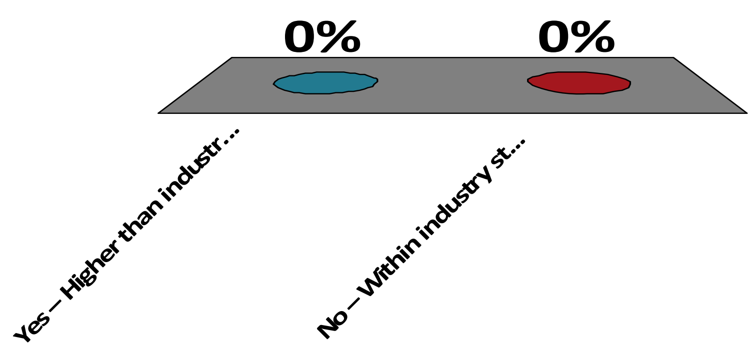
Symptoms of a Problem:

- Profits are small
- Less money available for family living and other investments

Are Production Costs Too High?...

Total Projected Revenues	$560/cow
Total Projected Cash Costs	$437/cow
Percent of Revenues ($437/$560)	78 percent

1. Yes – Higher than industry standards
2. No – Within industry standards



Need to Cut Costs and/or Increase Revenues at least $45 per cow

What Measures Should Be Used?

- Financial Efficiency

Asset Turnover Ratio

Operating Expense Ratio

Interest Expense Ratio

Financial Efficiency: Asset Turnover Ratio

- Why Calculate: To measure how efficient the farm business is using its assets to generate revenues.
- How to Calculate:
  Gross Farm Income ÷ Average Farm Assets
- Where to Find the Numbers: Income Statement and Beginning and Ending Balance Sheets

Financial Efficiency: Operating Expense Ratio

- Why Calculate: To measure how efficient the farm business is using its operating inputs to generate income.
- How to Calculate:

  Operating Expenses (exclude interest and depreciation) ÷ Gross Farm Income

- Where to Find the Numbers: Income Statement

Financial Efficiency: Interest Expense Ratio

- Why Calculate: To measure how much gross income is used to pay for interest on borrowed capital.
- How to Calculate:

  Interest Expenses÷ Gross Farm Income

- Where to Find the Numbers: Income Statement

How Do I Evaluate My Ratio Calculations?

- Efficiency Benchmarks
  - Asset Turnover Ratio
  - Operating Expense Ratio
  - Interest Expense Ratio

Low Risk	Moderate Risk	High Risk
Depends heavily on type of operation and whether it is owned or leased		
< 70%	70–85%	> 85%
< 10%	10–20%	> 20%

Possible Actions For Improvement: Increase the value of production, reduce production costs where prudent, control or reduce family living withdrawals, improve marketing practices, properly structure debt to revenue generation.

IN THE BUSINESS WORLD

FINANCIAL PERFORMANCE IS MEASURED BY THE POSITIVE CHANGE IN NET WORTH

Measuring the change in Net Worth is much like balancing a check book

Beginning Cash Balance

+ Inflows

- Outflows

= Ending Cash Balance

These are Linked

Beginning Net Worth/Equity

\+ Net Income (Profit)

– Withdrawals   Retained Equity

Profits must exceed withdrawals!

~~+/- Change in Valuation~~

= Ending Net Worth/Equity

Profitability

- Measures the ability of a firm to generate profits over a period of time!

4 Ways to Increase Profits

1. Maintain the same value of production while lowering production costs

- Before
- After

Examples: Overfeeding, renegotiate crop leases, reduced tillage, alternative rations

To
Reve

sed

sed
Expenses

2. Increase the value of production while maintaining the same production costs

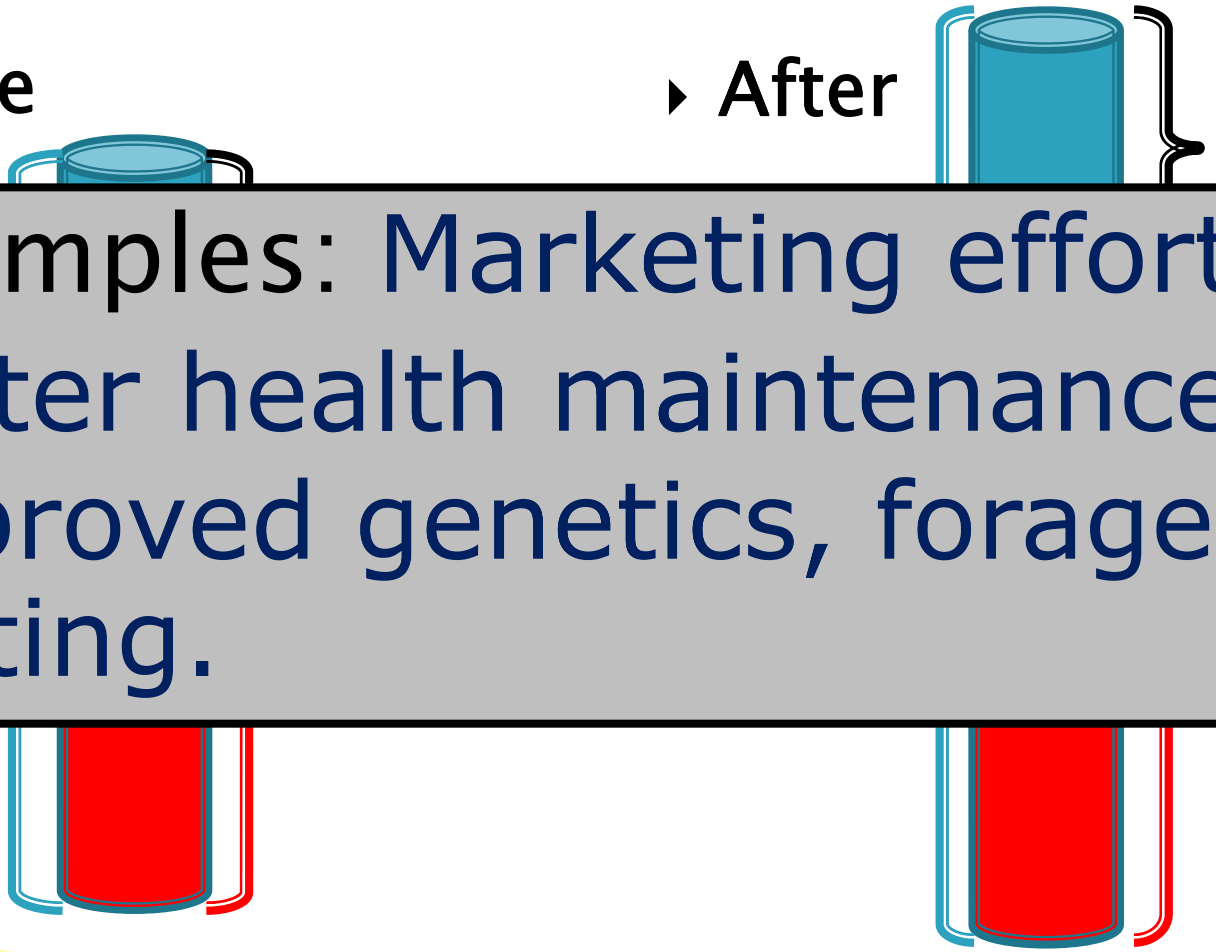
- Before
- After

Increased

Examples: Higher market prices (premium quality), timing of marketing, intensive management (crop yields, weaning %).

3. Increase the value of production more than the increase in production costs.

- Before
- After

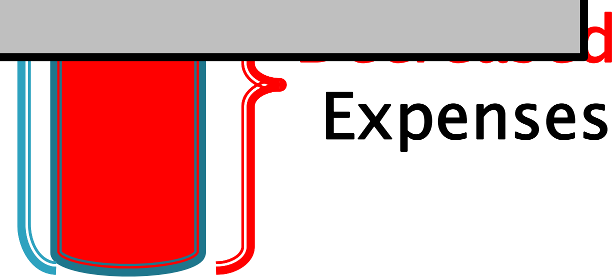


Examples: Marketing efforts, better health maintenance, improved genetics, forage testing.

4. Decrease the value of production less than the decrease in production costs.

- Before
- After

Examples: Smaller cows, reduced tillage, feeding poorer quality feeds, less fertilization.



Where Do You Want To Go?

Where Do You Want to Go?

First Requirement: Set clear goals (SMART)

Does your family have a common set of goals?

- Relevant
- Time Bound

Where Do You Want to Go?
Advantages of Setting Goals

- Shows where you want to go (provides a road map or long-term vision)
- Gives you short-term motivation to get where you want to go
- Prepares you for the future
- Gives purpose and direction to your decisions and actions

Where Do You Want to Go?

Goals: Some Examples

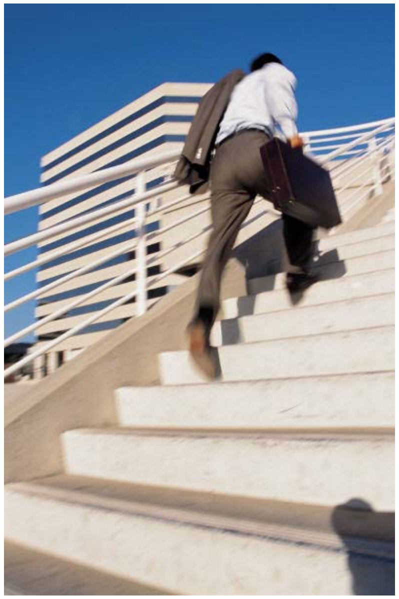
- Generate net farm income (profit) of at least $63,000 every year.
- Reduce operating costs or increase revenues by $50 per acre by 2013.
- Increase weaning percentage by 2 percent this year (without increasing costs).
- Cut family living expenses by $100 per month.
- Reduce debt by $40,000 over the next 5 years.
- Save $4,000 a year for retirement.

Where Do You Want to Go?
Goal Setting Activity

- Develop one goal
- Some guidelines to consider
  - The goal should by yours (all individuals have different goals)
  - Remember SMART: specific, measurable, attainable, realistic and time bound

How Can You Get There?

Requirement: Set clear objectives (the required steps to achieve your goals)



For Example: I will increase the profits of my cow/calf enterprise by 10% next year.

- Objectives:
  - Increase night supervision to keep more calves alive during calving.
  - Use put options to protect against downturns in market prices.
  - Reduce feeding costs (cheaper rations, reduce waste, do not overfeed)

How Can I Get There?
Objectives Activity

- List at least 2 objectives to accomplish your goal
  - Prioritize your activities
  - Identify the resources required to accomplish your objective

Take Home Messages

- Use good records to develop financial statements.
- Use the statements to analyze your financial health (at least annually).
- Business performance is measured by the positive change in net worth.
- Profits must exceed withdrawals.
- Set clear goals and objectives to strengthen your financial indicators.

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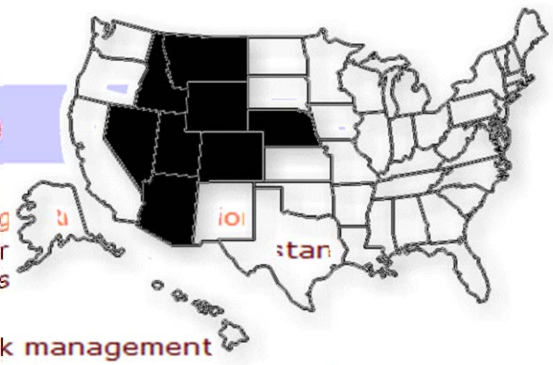

Welcome to RightRisk, risk management education products developed by the Rig
RightRisk is an innovative risk research and education effort to help you the farmer
and explore risk management decisions and evaluate the effects of those decisions

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Risk Management Coaching

Working Together to Manage Risk in Agriculture

- Risk Management Coach
  - Work privately with workshop participants
  - Allow open communication and collaboration
  - Focus efforts on the goals of the producer

Risk Management Coaching
Working Together to Manage Risk in Agriculture

- The focus is on "you".
  - **You** decide what goals to achieve.
  - **You** take actions to achieve your goals.
  - **You** have control over the management process.
  - **You** develop skills to make better management decisions.

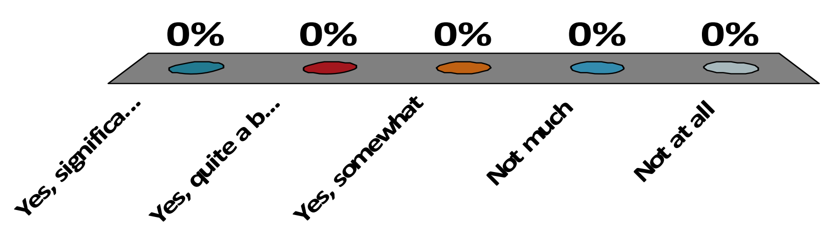
Risk Management Coaching

Working Together to Manage Risk in Agriculture

- Coaching can assist you to:
  - Establish risk management goals and actions to achieve those goals.
  - Focus on solutions and overcoming obstacles.
  - Share and discuss ideas.
  - Develop risk management skills.

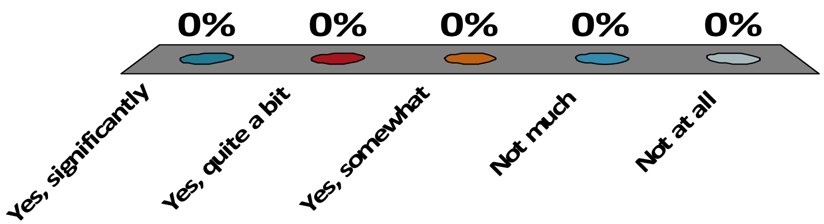
Has your understanding of **setting clear goals and objectives** increased?

1. Yes, significantly
2. Yes, quite a bit
3. Yes, somewhat
4. Not much
5. Not at all



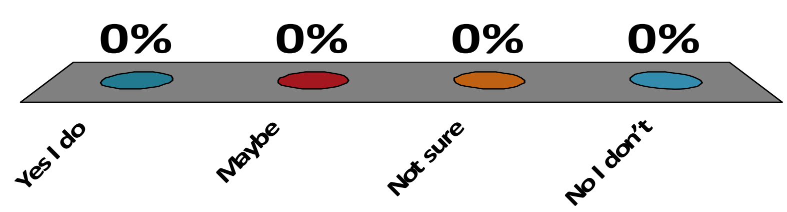
Has your desires to set clear goals and objectives for your operation increased?

1. Yes, significantly
2. Yes, quite a bit
3. Yes, somewhat
4. Not much
5. Not at all



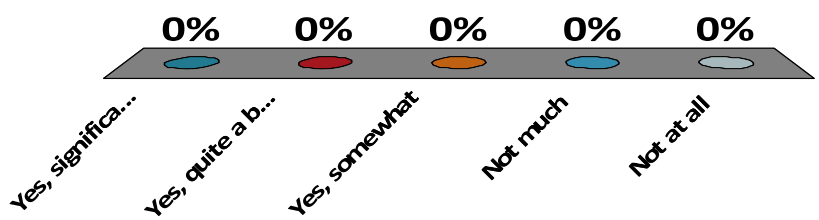
Do you plan to **set new goals and objectives** for your operation?

1. Yes I do
2. Maybe
3. Not sure
4. No I don’t



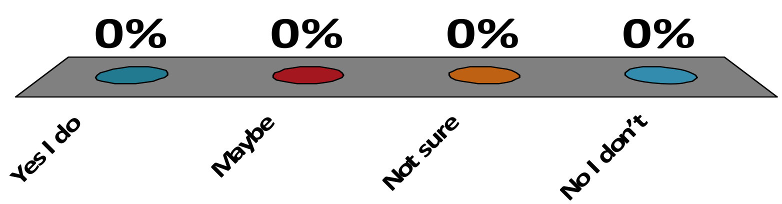
Has your understanding of **financial management and analysis** increased?

1. Yes, significantly
2. Yes, quite a bit
3. Yes, somewhat
4. Not much
5. Not at all



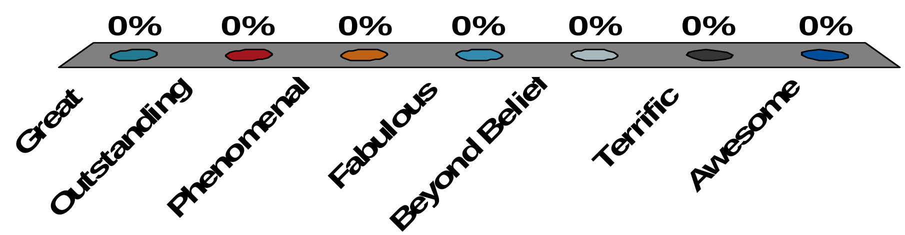
Do you plan to do more financial analysis on your operation?

1. Yes I do
2. Maybe
3. Not sure
4. No I don’t



Overall, how would you rate the value of this educational opportunity?

1. Great
2. Outstanding
3. Phenomenal
4. Fabulous
5. Beyond Belief
6. Terrific
7. Awesome



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