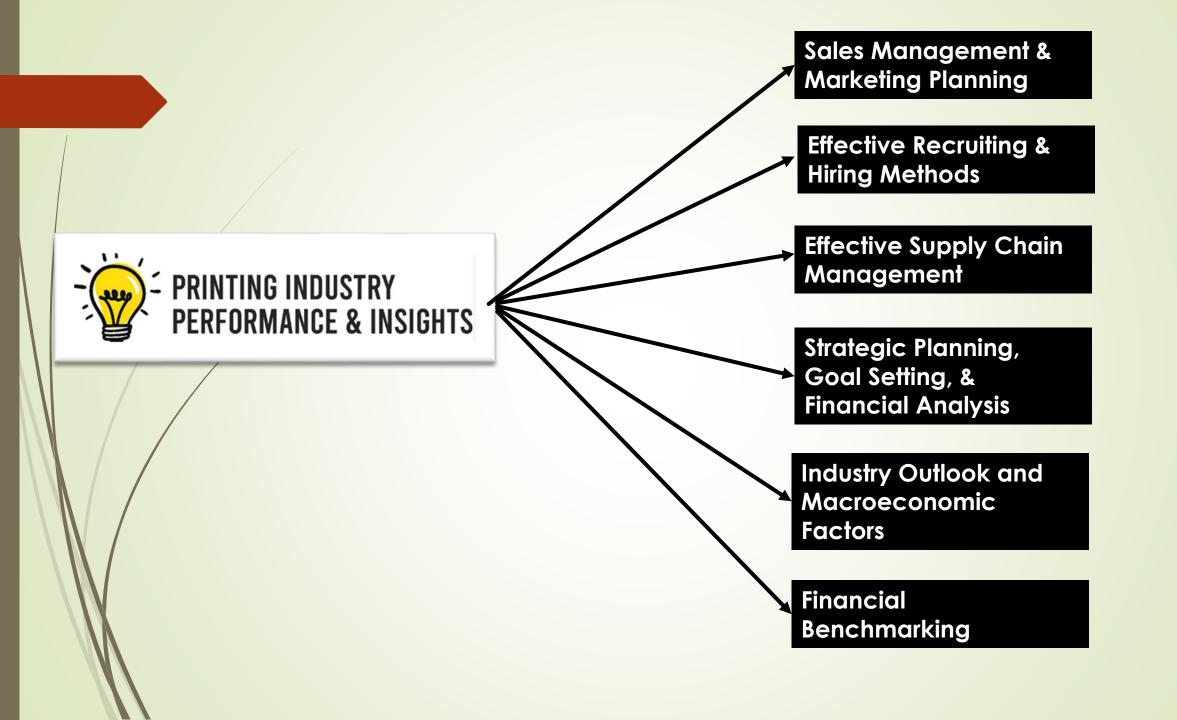
### Collective Conversations #42:

State of the Industry & Financial Benchmarks

"Printing Industry
Performance & Insights"
study



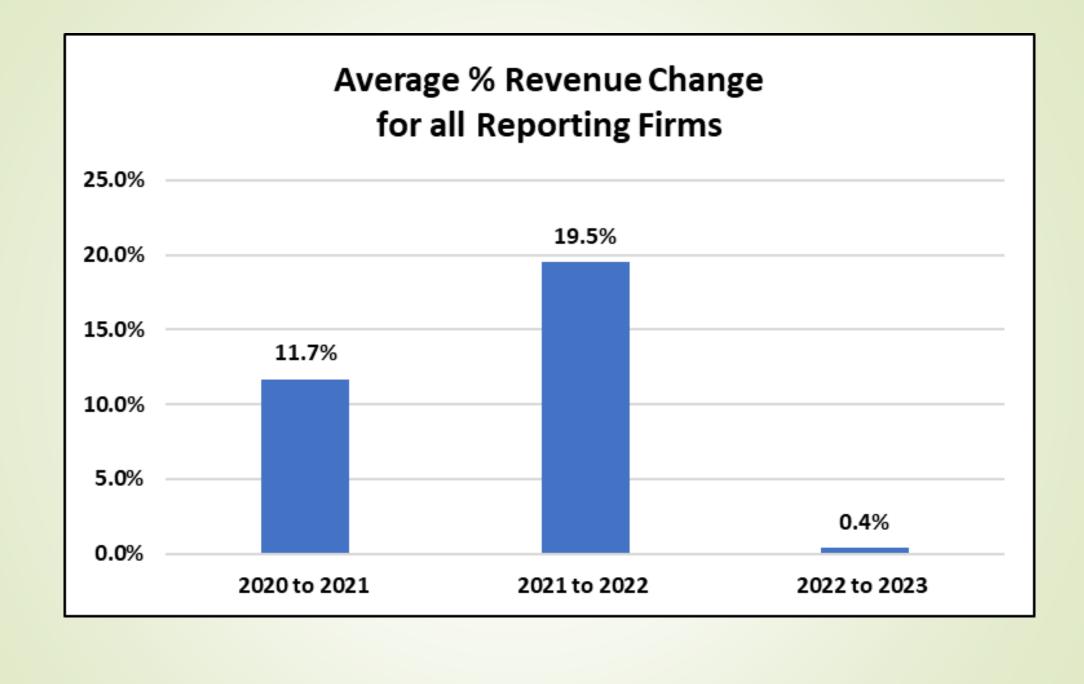
**Dr. Ralph Williams Jr.**Associate Professor of Management Jones College of Business Middle Tennessee State University

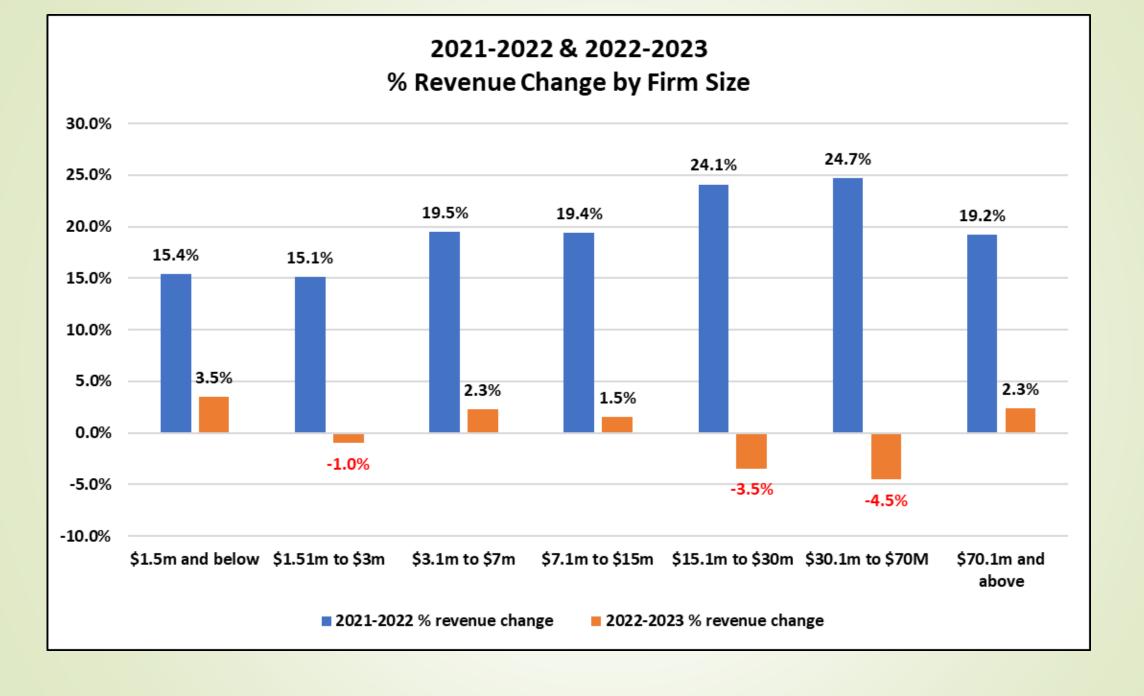


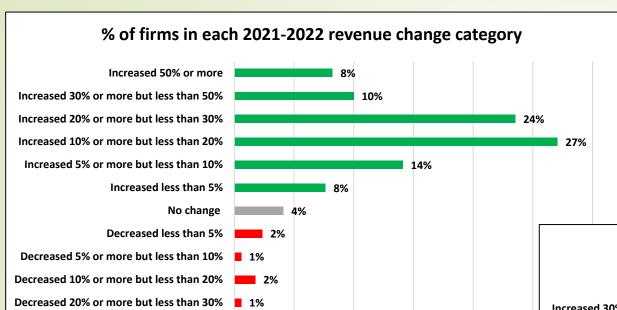


- In October two topics
  - **►** Industry Outlook
    - Interesting this year
  - A management topic
    - Effective ways to "brand your company as a good place to work"
- In May
  - Financial Benchmarking

### State of the Industry







5%

10%

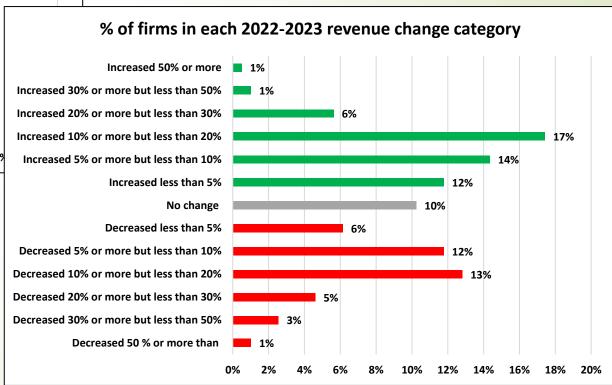
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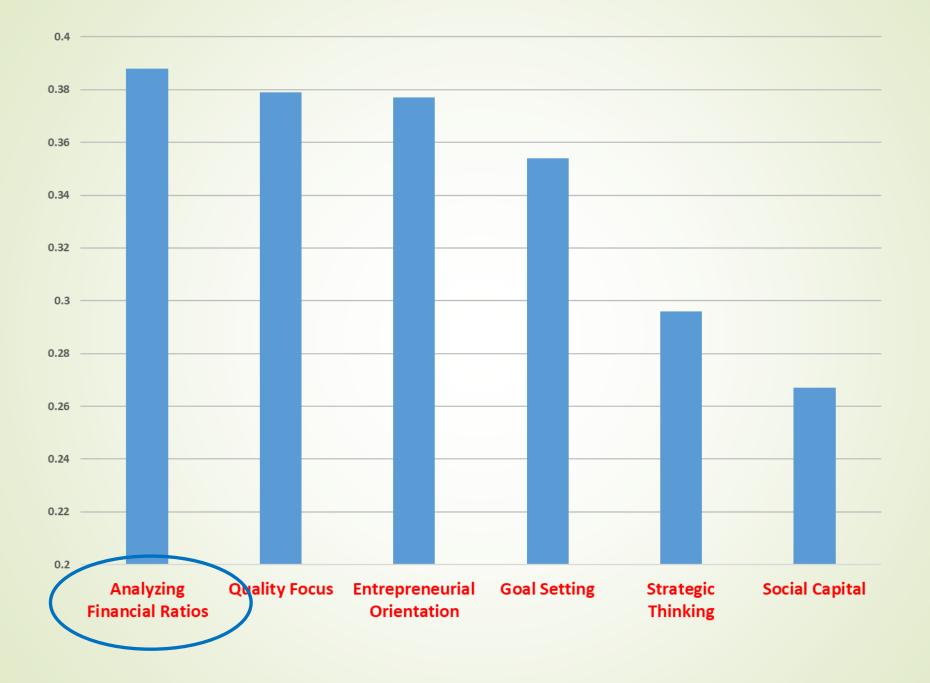
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Do our findings reflect what's happened recently in our industry?

If so, why this change in revenue growth?

### -Financial Benchmarks



#### But...

- Only a small proportion of small business leaders analyze their financials
- This has not changed as accounting technology has evolved
- Develop financial analysis skills a potential competitive advantage!
- It was for us!

## Our goal is to help you draw knowledge that will help you...

- Improve efficiency... do more with less
- Increase sustainability... mitigate business threats
- Focus on the right problems... should we focus on selling more or attacking costs?
- Make your business attractive to investors and lenders
- Improve owner return... that's your return!
- Improve profits and cash... that affects what you take home



# Financial Benchmarking

- Income statement and cost categories
- Balance sheet ratios
- Cash management indicators
- Key takeaways



- Eight income statement tables in our report
  - We stive to identify industry segments (strategic groups)
- Table 1 (see right) represents all firms in our study
- We provide "high-performers" in four of the eight tables

All Printing Firms Included in our drivey			
	All Firm	High-Performers	Percentage Differences
Number of firms	104	35	
Total Revenue	100.00%	100.00%	
Materials and Outside Services			
Paper and substrates	23.08%	21.38%	-7.37%
Other chargeable materials	6.99%	6.80%	-2.72%
Outside chargeable services	8.44%	8.50%	0.71%
Total Materials and Outside Services	38.51%	36.68%	-4.75%
Factory Costs			
Payroll including taxes and benefits	19.61%	18.61%	-5.10%
Other factory costs excluding depreciation	11.34%	8.85%	-21.96%
Depreciation	4.03%	5.21%	29.28%
Total Factory Costs	34.98%	32.67%	-6.60%
Cost of Goods Sold	73.49%	69.35%	-5.63%
Gross Profit	26.51%	30.65%	15.62%
Administrative Costs			
Payroll including taxes and benefits	7.23%	5.42%	-25.03%
Other administrative costs	4.08%	3.43%	-15.93%
Total Administrative Costs	11.31%	8.85%	-21.75%
Sales and Marketing Costs			
Payroll including taxes and benefits	6.72%	6.82%	1.49%
Other sales and marketing costs	1.14%	1.23%	7.89%
Total Sales and Marketing Costs	7.86%	8.05%	2.42%
Interest	0.78%	0.71%	-8.97%
Income Before Taxes	6.56%	13.04%	98.78%
EBITDA	11.37%	18.96%	66.75%
Employees per \$1mm in revenue	4.89	4.79	

#### EBITDA

- (Earnings Before Interest, Taxes, Depreciation, and Amortization)
- An excellent financial benchmarking tool
- High-performers 67% higher EBITDA percentage
  - There are firms in our industry that are "ROCKING IT"!
  - Little differences in cost categories "add up"!
  - Other thoughts related to high-performers high EBITDA?

All Printing Firms Included in our Survey				
	All Firms	High- Performers	Percentage Differences	
Number of firms	35			
Total Revenue	100.00%	100.00%		
Materials and Outside Services				
Danas and subshales	22 0007	01 2007	7 2707	
Interest	0.78%	0.71%	-8.97%	
Income Before Taxes	6.56%	13.04%	98.78%	
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Employees per \$1 mm in revenue	4.89	4.79		

- Paper
  - High-performing firms spend a smaller percentage of TOTAL revenue on paper
  - Significant percentage differences, ranging from -7.37% to -15.90%.
- Why do you think high performers spend less on paper?
  - Higher prices to customers
  - Provide more complementary services
  - More efficient less waste
  - Buy more inventory, which reduces prices (our cash management numbers don't support that)
  - Other thoughts?

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- Total factory costs
  - In three industry categories and in the all-firms report, high performers spent less on "factory payroll taxes and benefits" and "total factory costs"
- Why do you think high performers spend less on factory costs?
  - Economies of scale
  - Culture... Lean and TQM
  - Revenue growth without increasing factory costs
  - Other thoughts?

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- Depreciation
  - Consistently, the high performers incurred more depreciation
- Why do higher performers incur more depreciation costs?
  - Owning vs. renting the building
  - Investing more in new equipment
    - Newer equipment
    - Technology / Automation
- When considering an equipment investment
  - Develop a "proforma" income statement (budget)
  - Consider the financial effects (more than passion, as I did sometimes)
  - More related to ROA later

All Printing Firms Included in our Survey			
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Dan as and autobates	02 0007	01 2007	7 2707
rayionincioaniy laxes ana beneins	17.01/0	10.01/0	-3.10/0
Other factory costs excluding			
depreciation	11.04%	8.85%	-21.04%
Depreciation	4.03%	5.21%	29.28%
	~	~	

- Total Administrative Costs
  - Consistently, the high performers incurred less administrative costs
  - Almost 22% less for all firms (see right)
  - Doing more with less administrative resources
- Why do high performers spend less on admin costs?
  - Staff members taking on multiple roles,
  - Increasing revenue without increasing admin staff
  - Benefiting from technology to replace manual tasks
  - Higher-quality staff
- Other thoughts?
- Why might lower-performers spend more on admin?

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Salas and Markotina Costs			

- Total Sales and Marketing Costs
  - Three out of four high-performer groups spent more on sales and marketing
  - This might prompt you to invest more in this cost area
  - Are you "farming" or "hunting"?
  - But again, consider the financial outcomes
    - Best and worst outcomes

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Interest	0.78%	0.71%	.8.97%	
Income Before Taxes	6.56%	13.04%	98.78%	
EBITDA	11.37%	18.96%	66.75%	
Employees per \$1mm in revenue	4.89	4.79		

- Providing Related Services (Table 8)
  - Non-print services that complement and expand the value firms provide to customers
  - Name some related services
  - Consistent with previous PIPI findings
  - A strategic decision
    - How can I add more value to what we provide customers?
    - Not an easy decision.
    - Consult with customers
      - What do you need?
      - How can we help you?
    - Build a proforma (budget)
      - Best and worst outcomes

General commercial printing firms - firms applying a combination of digital, sheetfed offset, and wide format, with some firms focused primarily on digital.

	All Firm	Significant Revenue from Related Services	Percentage Differences
Number of firms	96	23	
Total Revenue	100%	100%	

Interest	0.68%	V.V-7/0	-50.00%
Income Before Taxes	o.53%	9.51%	45.64%
EBITDA	10.77%	13.31%	23.58%
Employees per \$1mm in revenue	3.05	5.42	

- Use the income statement financial benchmarks to assess your firm's performance!
- Look deeper at the numbers in our report than we are today!
- Like an NFL football team!
- But more importantly, <u>use</u> our financial reports to open your eyes to a performance improvement path!
  - Where should you apply less resources... or more resources?
- More than "budgeting"... strategic planning!
- May help you avoid hubris

# Financial Benchmarking

- Income statement and cost categories
- Balance sheet ratios
- Cash management indicators
- Key takeaways



#### **Balance** sheet ratios

- Balance sheet ratios (Table 10)
  - Report shows how to calculate these ratios
- Current and Quick ratios
  - High performers better
  - But both groups are STRONG!
  - Healthy!
  - Prepared for challenges!
- Why were the current ratios so strong in April 2023?

All Printing Firms Included in our Study					
All Firms High-Performers Percentage Differences					
Number of firms	56	11			
Current Ratio	3.31	3.59	8.46%		
Quick Ratio	2.41	2.92	21.16%		
Revenue-to-Total Assets Ratio	1.90	1.97	3.68%		
Total Debt to-Total Assets	46.77%	42.38%	-9.39%		
Long-term Debt-to-Long-Term Assets	43.43%	43.48%	0.12%		
Return on Total Assets (ROA)	13.14%	34.49%	162.48%		
Return on Equity (ROE)	24.47%	56.84%	132.28%		

### **Balance** sheet ratios

- Balance sheet ratios (Table 10)
  - Report shows how to calculate these ratios
- Total Debt-to-Total Assets (TD-to-TA)
  - Total debt = total liabilities
  - Which includes total liabilities, including current liabilities
  - All firms TD-to-TA is a little higher than high-performers
    - Which reinforces our current ratio numbers
- Long-term Debt-to-Long-term Assets
  - Very close
- Use these ratios to assess how much debt you are using

#### All Printing Firms Included in our Study Percentage **All Firms High-Performers Differences Number of firms** 56 11 **Current Ratio** 3.31 3.59 8.46% **Quick Ratio** 202 2.41 21.16% 1.90 3.68% Revenue-to-Total Assets Ratio 1.97 46.77% -9.39% Total Debt to-Total Assets 42.38% **Long-term Debt-to-Long-Term Assets** 43.43% 43.48% 0.12% Return on Total Assets (ROA) 13.14% 34.49% 162.48% Return on Equity (ROE) 24.47% 56.84% 132.28%

#### **Balance** sheet ratios

- Balance sheet ratios (Table 10)
  - Report shows how to calculate these ratios
- Return on Total Assets (ROA)
  - WOW! the difference between all firms and high-performers
  - My benchmark Mutual fund returns
  - If your ROA is less than 17%
    - Look for ways to increase net income
    - Or consider divesting some underused assets
  - If you are considering investing into more assets
    - Project your net income (worst and best case)
    - And project your ROA with the new asset added

#### All Printing Firms Included in our Study High-Percentage **All Firms Performers Differences Number of firms** 56 11 **Current Ratio** 3.31 3.59 8.46% **Quick Ratio** 2.41 2.92 21.16% Revenue-to-Total Assets Ratio 1.90 1.97 3.68% Total Debt to-Total Assets 46.77% 42.38% -9.39% **Long-term Debt-to-Long-Term Assets** 12,10/0 43.48% U. 12/0 162.48% Return on Total Assets (ROA) 13.14% 34.49% 122,20/0 Return on Equity (ROE) 24.47 56.84%

# Financial Benchmarking

- Income statement and cost categories
- Balance sheet ratios
- Cash management indicators
- Key takeaways



- Cash management indicators (Table 11)
  - Report shows how to calculate these ratios
- "CREAM"
  - <u>Cash Rules Everything Around Me</u>
- Cash is KING
- Profitable, growing, companies can run out of cash
- Three cash management indicators
  - Days in Inventory
  - Days in Accounts Receivable
  - Days in Accounts Payable

All Printing Firms Included in our Study						
All Firms High-Performers Percentage Differences						
Number of firms	56	11				
Days in Inventory	102.28	85.80	-16.11%			
Days in Accounts Receivable	47.43	38.87	-18.05%			
Day in Accounts Payable	71.56	61.29	-14.35%			
Cash Conversion Cycle	78.15	63.38	-18.90%			

- Cash management indicators (Table 11)
  - Report shows how to calculate these ratios
- Days in Inventory (DI)
  - On average, how long does inventory sit on our shelves
  - When you see inventory on shelves, see it as CASH
- High performers have shorter DI
  - Given the paper environment, DI is possibly a more important measure now
  - We wondered if high-performers would use their resources to buy more paper?
  - Supply chain research Rational vs. Emotional
  - Accounting??
  - All said, we see these DIs as high 3 to 3.5 months of inventory

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- Cash management indicators (Table 11)
  - Report shows how to calculate these ratios
- Days in Accounts Receivable (AR)
  - On average, how long do our customers take to pay the invoices we send
- High performers have shorter AR
  - Our approaches
  - Should salespeople or admin folks contact customers about AR?

All Printing Firms Included in our Study				
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- Cash management indicators (Table 11)
  - Report shows how to calculate these ratios
- Days in Accounts Payable (AP)
  - On average, how long do we take in paying our suppliers' invoices
- High performers have shorter AP
- Conflict of interest
  - Higher AP increases cash in our bank account
  - But a higher AP is not taking care of your suppliers
- Make rational decisions about how soon to pay bills
  - From a big, and individual supplier, view
  - Have proactive talks with suppliers when challenging times are coming

All Printing Firms Included in our Study				
	All Firms	High- Performers	Percentage Differences	
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Cash Conversion Cycle	78.15	03.30	-18.90%	

- Three cash management indicators
  - Days in Inventory
  - Days in Accounts Receivable
  - Days in Accounts Payable
- Consider assessing these continuously, every month.
  - Look for trends

All Printing Firms Included in our Study				
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# Financial Benchmarking

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# Key Takeaways and Potential Practical Applications

- High-performing firms spend less on "total materials and outside services."
  - When this happens, more revenue is applied to "in-house" costs and moves to the bottom line (profit)
- High performers spend less on total factory costs
  - Maybe efficiency, cutting costs, or economies of scale
- High performers incur less administrative costs
- High performers spent more on total sales and marketing costs
- Providing related services enhances performance
  - If done right
- It appears that higher performers manage cash better—days in inventory, days in accounts receivable, days in accounts payable
- There are high performers in our industry, and they ROCK!
  - EBITDA and ROA!
  - Be a rocker!!! Use the numbers to get there!

- There's a lot more detail in our report
- BENCHMARKING a deeper look than you see in the points we cover today!
- Compare your financial numbers to those in our report....
- ....and look for actions for improving performance!
- More to come on how to do and apply financial benchmarking

### Closing

With more survey participation, we can provide more actionable knowledge!!

- Email me if you would like a copy of the slides
  - ralph.williams@mtsu.edu
- ■Thank you!