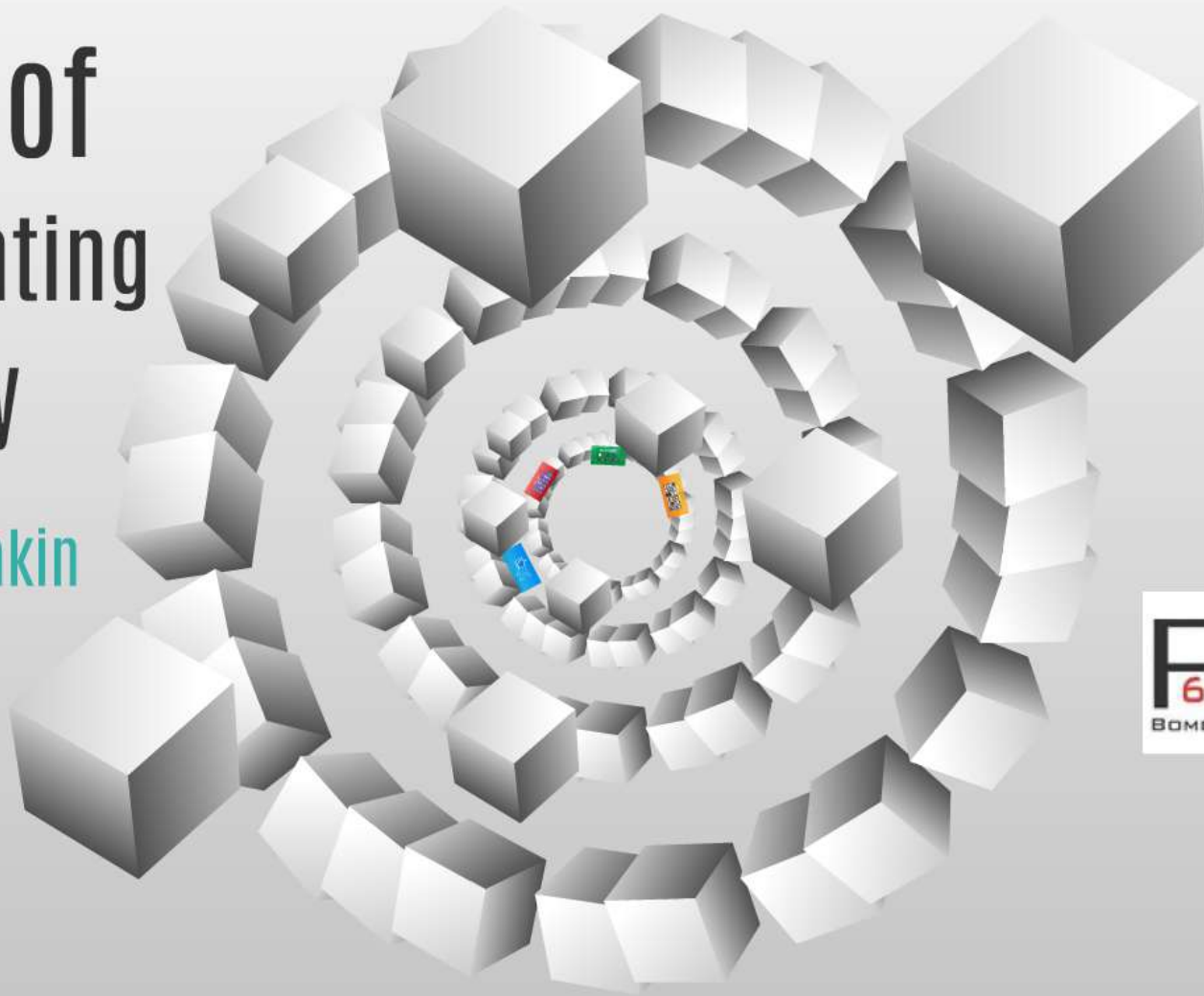


# State of the printing industry

Michael Makin

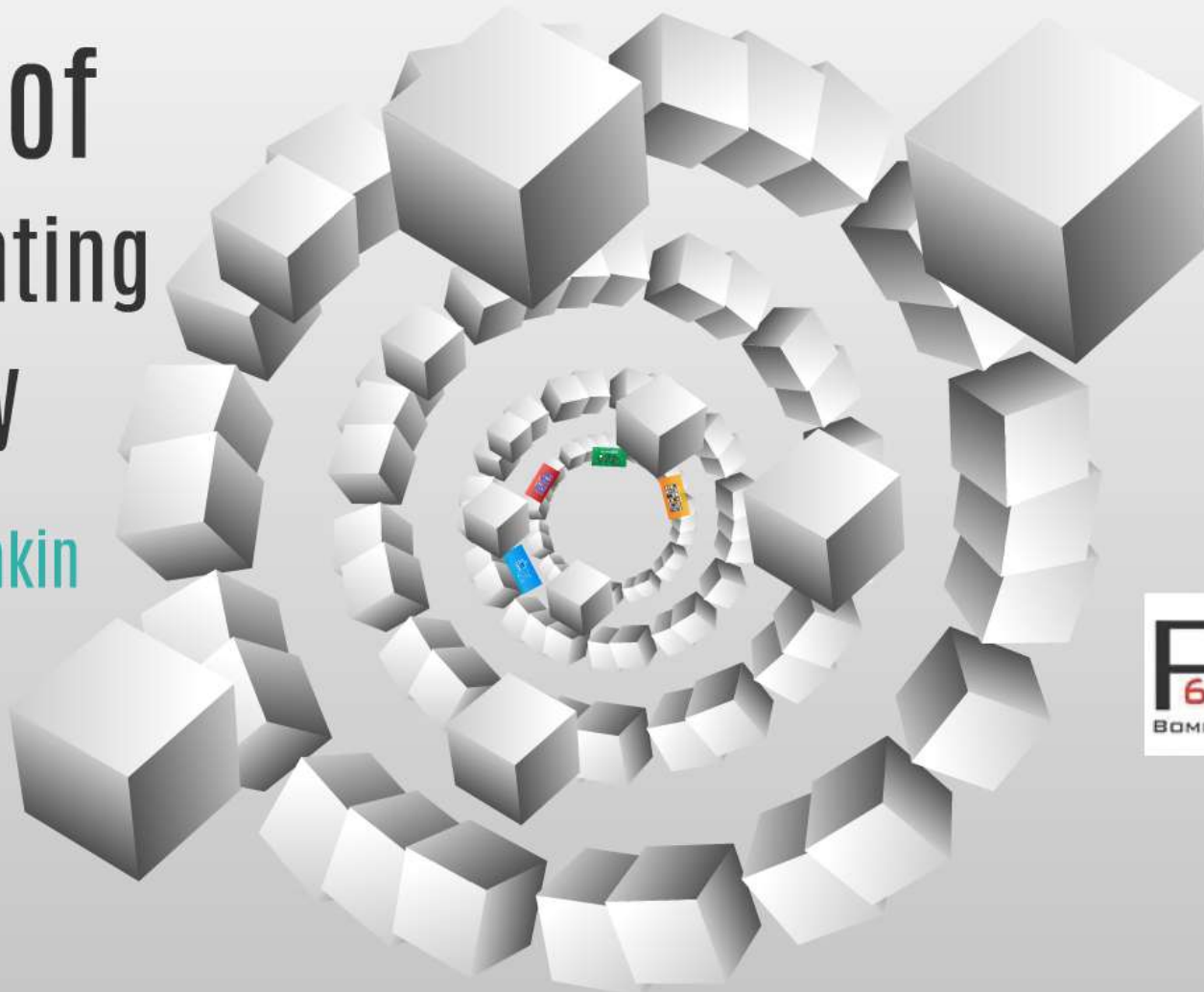
President & CEO



# State of the printing industry

Michael Makin

President & CEO



# What I'll Cover...

- Update on current macroeconomic conditions
- Outlook for 2020
- Current print markets and forecast
- Key opportunities and challenges for printers
- Q & A



## The Economy Trends Upwards, Despite Trade Uncertainties



- Advanced Estimates indicate that GDP grew by 1.9% in the third quarter
- Core inflation cooled from the slight uptick we saw throughout the summer and was slightly lower than Fed target rates.
- Consumer sentiment continues to rise and is seen as one of the driving forces behind continued economic growth
- Stock prices have had a healthy 2019. S&P 500 is already up more than 25% midway through December which is typically its best performing month

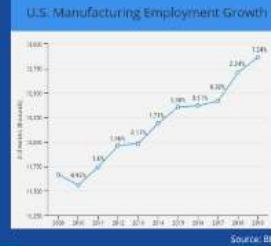


- Slower growth attributed to weaker global economy and trade tensions
- Since June of 2009 we have seen more than 124 months of sustained growth
- Now the longest expansion in the 164 years of record keeping by the National Bureau of Economic Research (Broke the record in June)

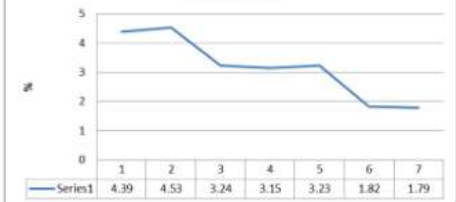
## Hiring in the manufacturing sector remains tepid



- 54,000 new jobs added in November
- Mostly due to the end of auto industry strikes (43,000 jobs lost the month before)

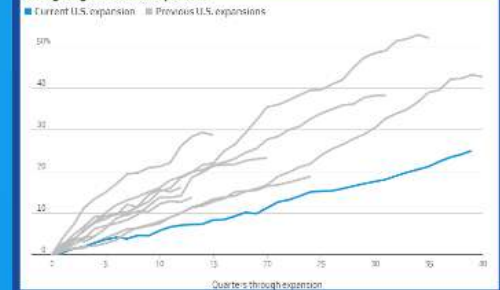


## Average Annual Growth by Decade: 1950-2010



- Too much of a good thing can be bad
- The average annual growth rate of inflation adjusted GDP has generally slowed since the 1950s
- 2 percentage points since the 50s
- Over one percentage point since the 70s and 80s

## Change in gross domestic product



## Employment Picture

- 266,000 jobs added in November
- 110 consecutive months of labor growth
- Labor participation rate up to 63.2 percent
- Unemployment still near 17 year low (3.5%)
- Wages increasing at pace of around 3.1%
- Although hiring slowed more than anticipated, the economy appears to be on firm footing

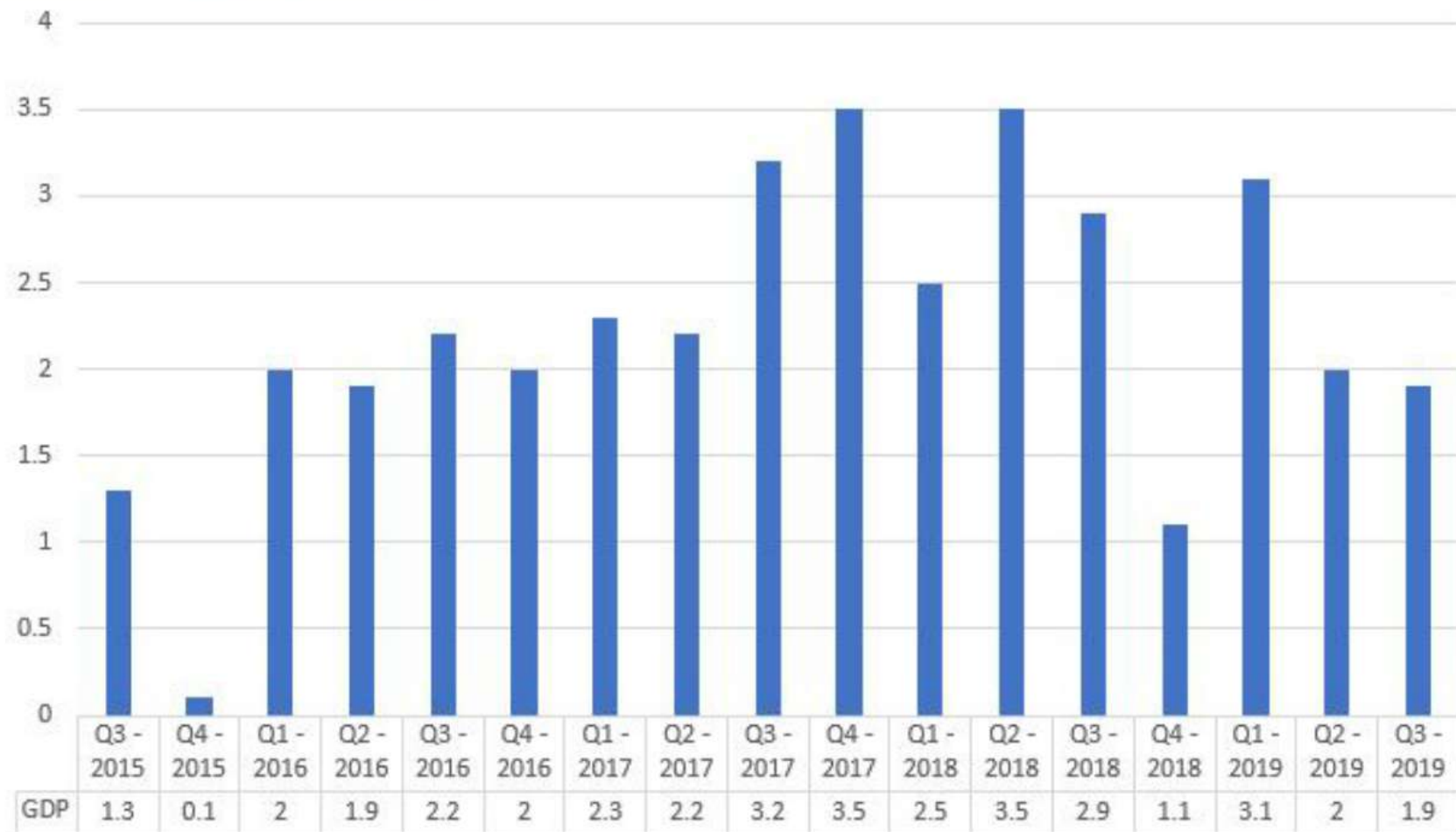


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# GDP Change by Quarter





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U.S. Manufacturing Employment Growth

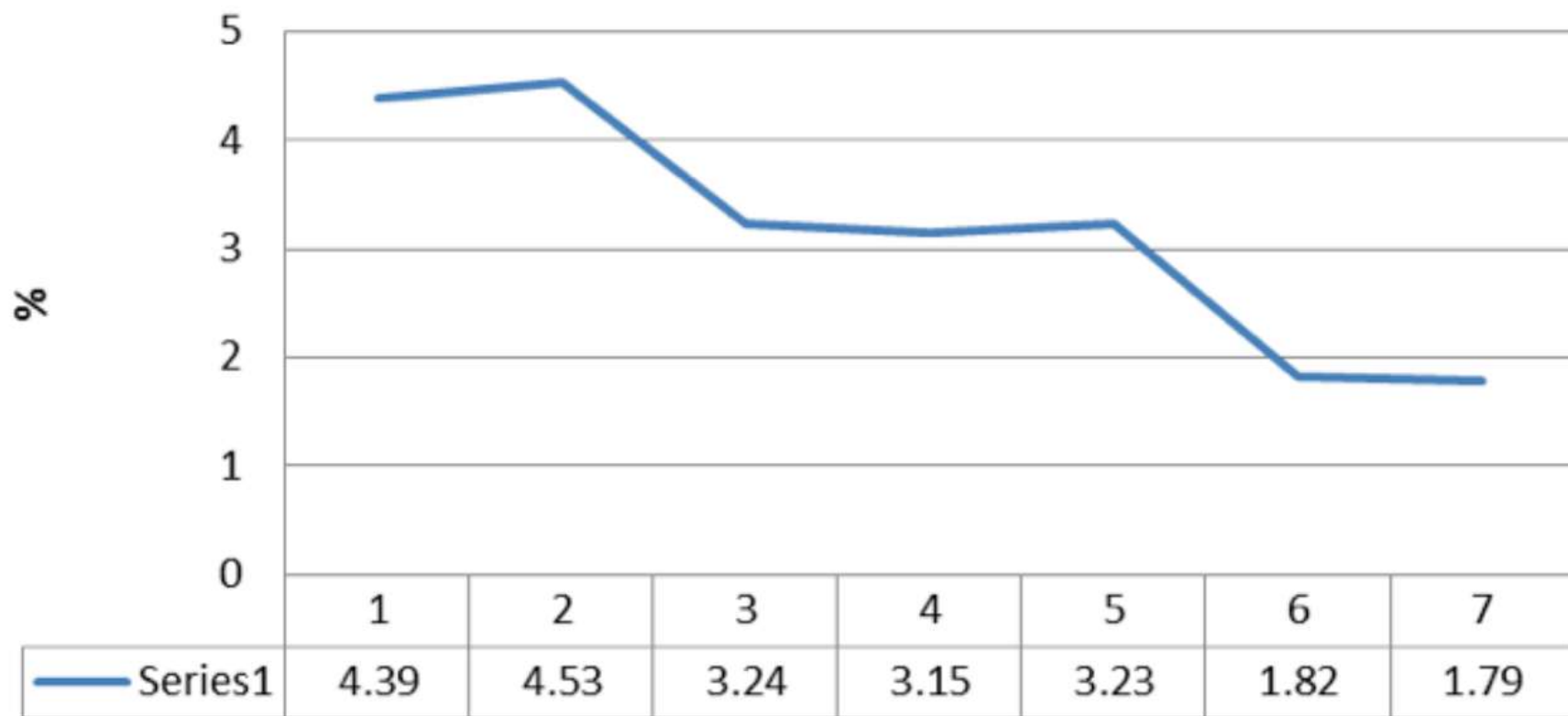


Source: BLS



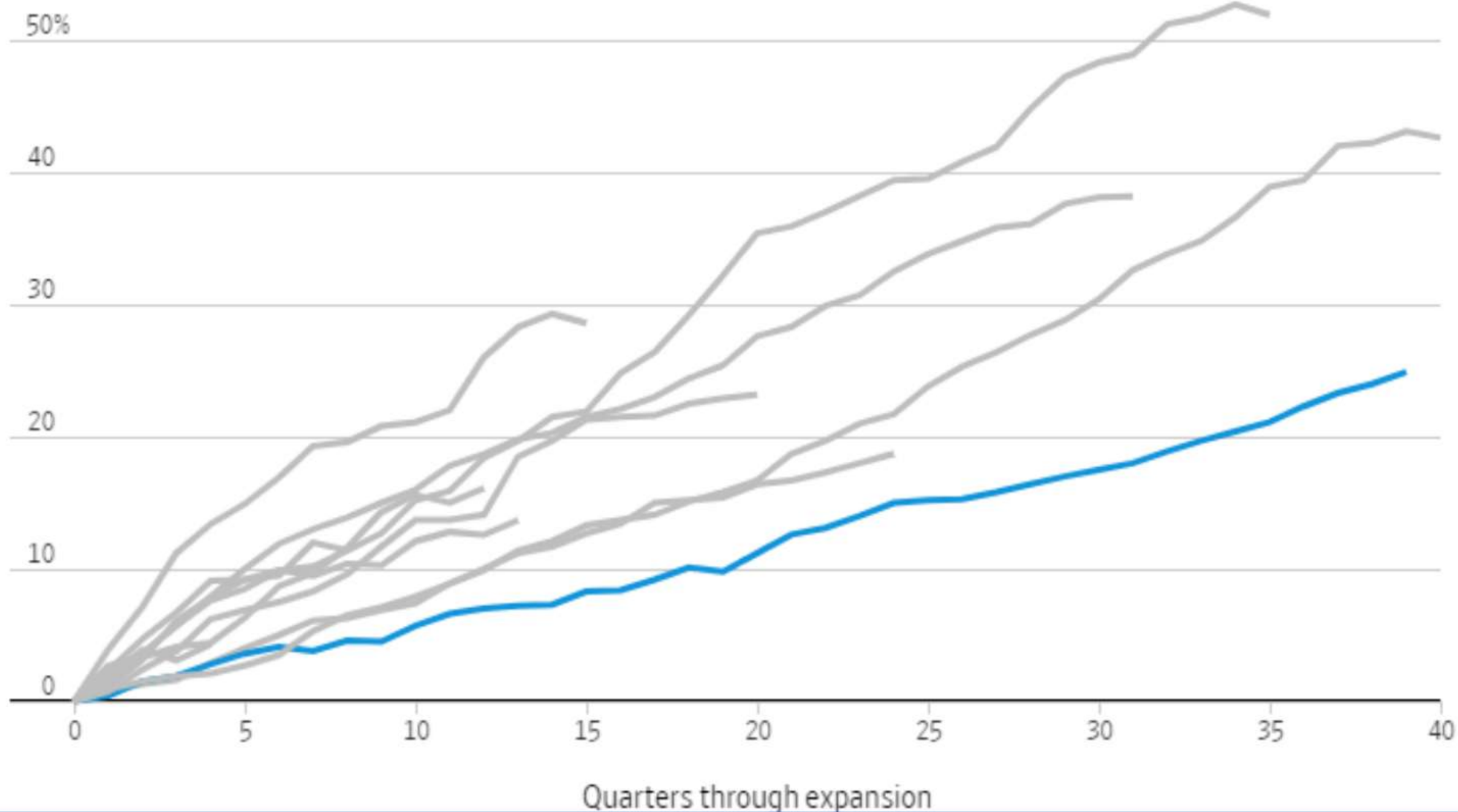
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## Average Annual Growth by Decade: 1950-2010



## Change in gross domestic product

■ Current U.S. expansion ■ Previous U.S. expansions





# 2020 Outlook



## 2020 Economic Scenarios



- Trade wars or military conflict
- Viability of SS/Medicare
- Uncertainty of USPS
- Internal political issues
- Election Year



## Upward Driving Forces

- Energy Self-Sufficiency
  - Investment and innovation in the US energy sector (oil/gas mostly) has moved us closer to independence. US is a net exporter oil for the first time since the 40s
- Labor Force Dynamics
  - More elastic and dynamic than in the past, which can contribute to economic growth without the repercussions of inflation
- Federal Reserve Accommodations
  - More willing to let economy grow without intervention than in the past

## 2020 Economic Scenario: Upward Driving Forces

- Logistical Smoothing of Inventory Cycles
  - Modern logistics prevent some of the destabilizing factors that were once present in the inventory cycle
- Services Domination Over Goods
  - Our economy produces more services than goods which could reduce impacts of the inventory cycle that might have been felt in the past
- Size and Scope Dynamics
  - US economy produces around 1/4th of the global GDP. Almost enough size and scope to push its own way through global headwinds

## 2020 Recession Scenario: Downward Driving Forces

- Global Headwinds
  - German economy continues to shrink (4th largest economy)
  - Industrial output in China is growing at its slowest pace in 17 years
  - UK - Brexit negotiations
- Escalating Trade Tensions
  - Geopolitical Tensions - Middle East and North Korea
- Federal Reserve Miscalculations
- Unanticipated uptick in inflation

## Current Downside Risks

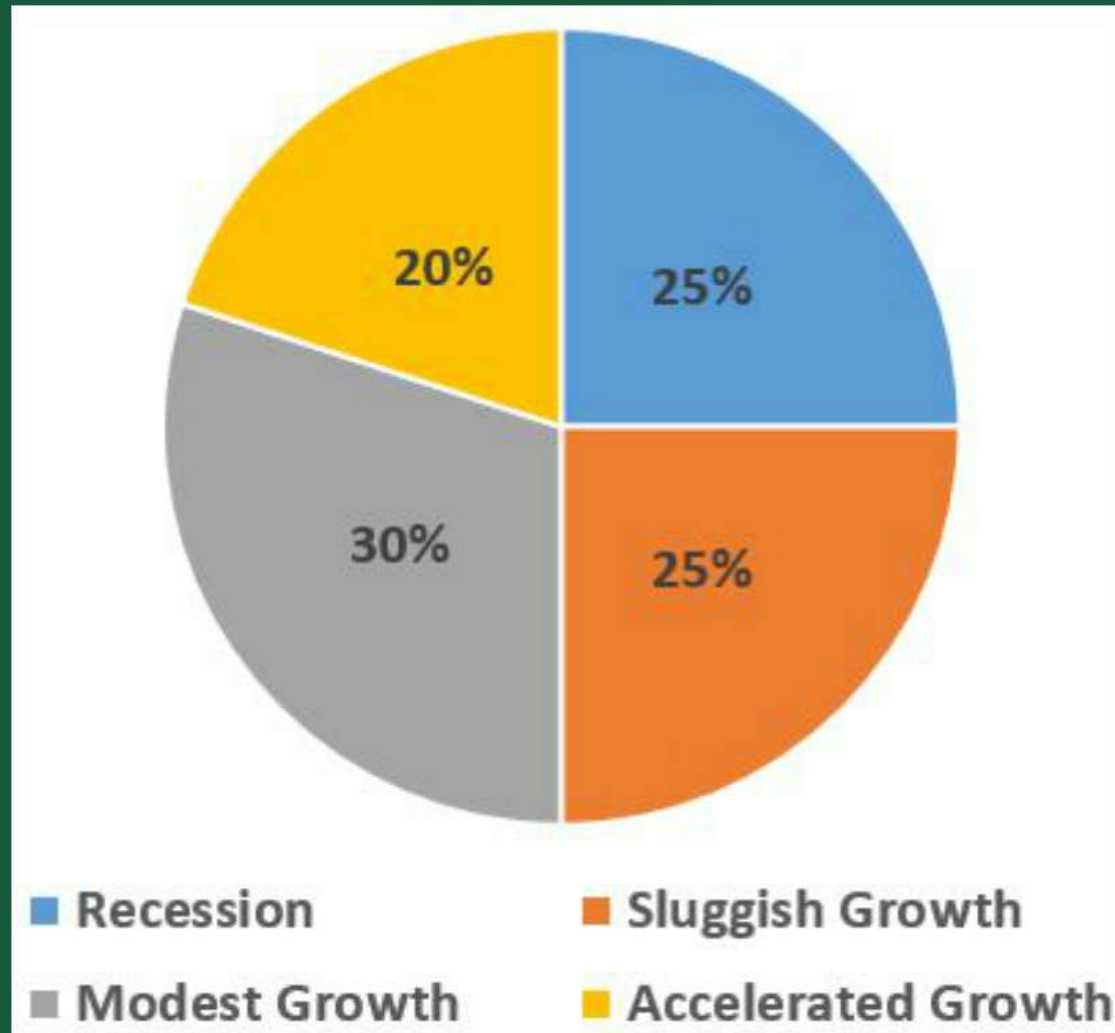
- Trade restrictions/barriers slow down US and global economies (China and USMCA tentative agreements will help ease this concern)
- Labor shortages restrict growth coupled with the immigration issues
- Bottlenecks - transportation, infrastructure
- Cost and price pressures and potential missteps by the Federal Reserve
- Interest rate increases because of inflation
- Other wild card issues

## Sluggish/Modest Growth Scenario

- Any combination of a few of the recession risks can cause the sluggish or modest growth scenario to materialize
  - Will depend on the severity of recession factor impacts
- Most likely that we will continue to see modest growth



# 2020 Economic Scenarios



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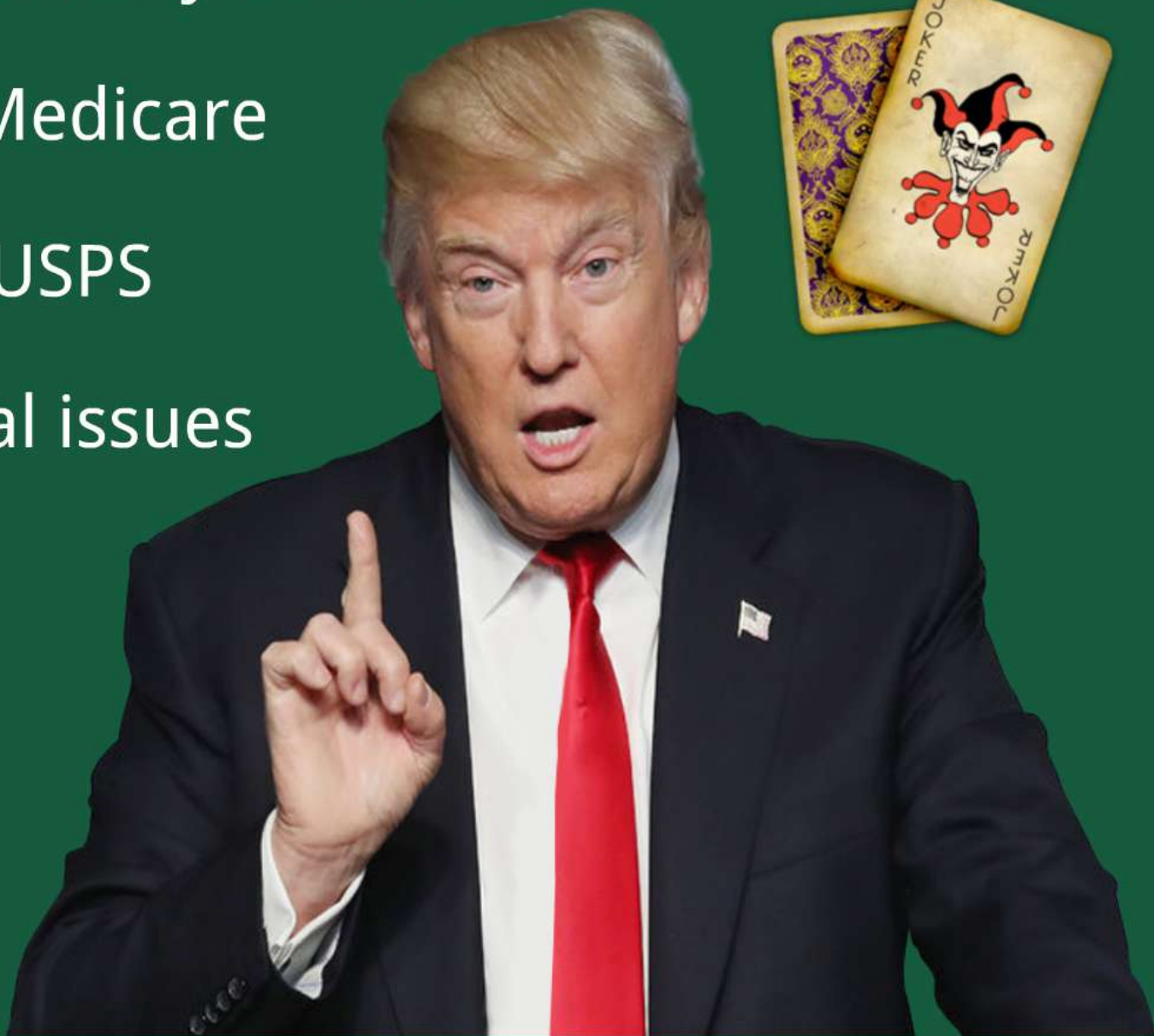
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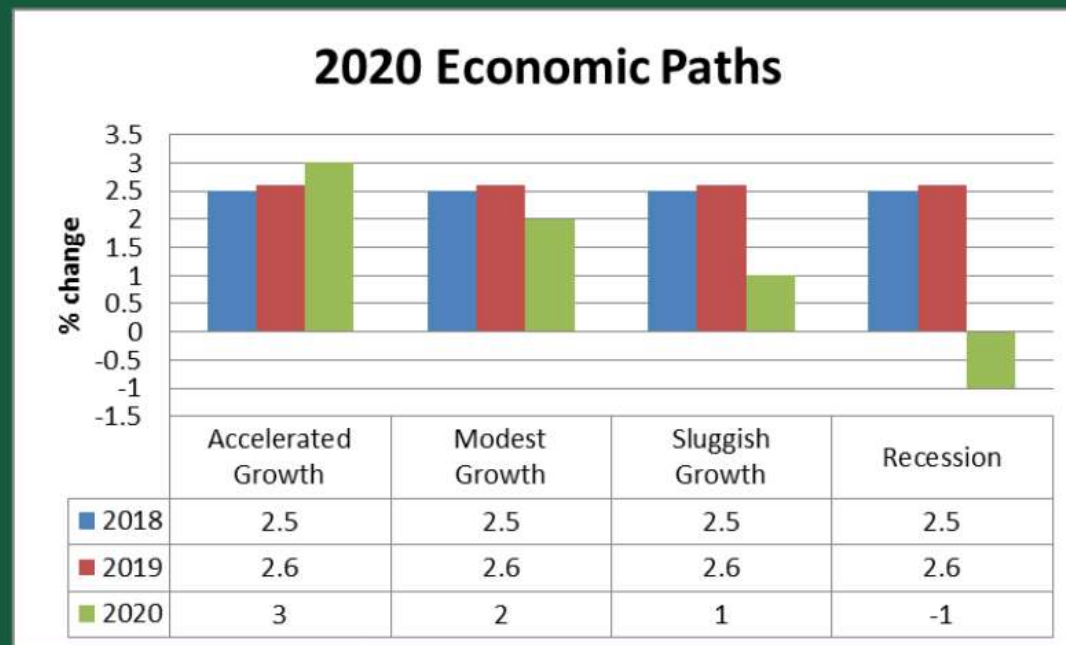
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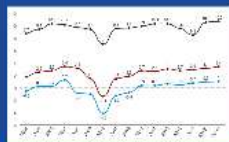
# Current Print Markets



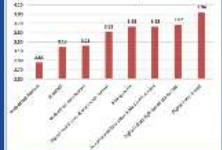
## Manufacturing Industries Struggle to Avoid Contraction

- 4 straight months of contraction after 35 straight months of growth
- 11 of 18 manufacturing sectors (including print) reported a decline in production in November
- One positive is that print saw its prices for raw materials drop while other sectors prices rose

## Industry Profitability



2016-17 Sales Change



## Ancillary Services Provided

Ranked by % of Printers Providing	
1. Web-to-print	2. Mailboxes
3. On-demand printing	4. Variable data printing
5. Digital printing	6. Full-service printing
7. Digital printing	8. Full-service printing
9. Digital printing	10. Full-service printing
11. Digital printing	12. Full-service printing

## Profit Scenarios for 2020



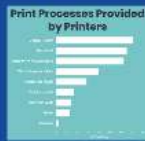
## Warm Markets

**BROCHURES**  
PERSONAL CARE LABELS  
**GRAPHIC FINISHING**

## Print's 2018 Economic Footprint

Direct jobs	18,500
Indirect jobs	15,500
Total jobs	34,000
Direct output	\$1.1B
Indirect output	\$1.1B
Total output	\$2.2B

## Print Production



## Why?



## Demand Perception For Ancillary Offerings

1. Web-to-print	2. Mailboxes
3. On-demand printing	4. Variable data printing
5. Digital printing	6. Full-service printing
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## Cool Markets

**CIRCULARS**  
**MAGAZINES**  
**Laterals**  
**Finance & Legal**  
**Newsletters**  
**CATALOGS**

## Outlook By Print Processes

• Inkjet  
• Wide Format  
• Digital/toner

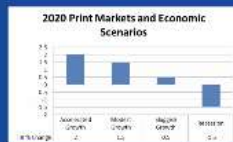
## Print Still Dominates



## Top Products Provided by Printers



## Print Scenarios 2020



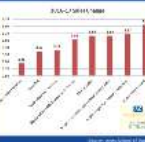
## Top Verticals

• Packaged Foods (\$19B)  
• Medical/Pharma (\$16B)  
• Publishing (\$11.4B)  
• Telecomm (\$11B)  
• Banking/Insurance (\$10.5B)  
• Real Estate (\$10.5B)  
• Travel/Hospitality (\$9.3B)  
• Automotive (\$8.2B)  
• Food Service (\$8.2B)  
• Home Impr. (\$7.2B)

## Paper Prices



## Relationship Between Sales and Print Process



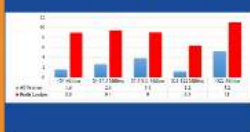
## Demand Perception For Products



## Hottest Markets

**Pharmaceuticals/Consumer Labels**  
**SIGNS**  
**SPECIALTY PRINTING**  
**PACKAGING/ENVELOPES**

## Profit Rates By Sales Volume



## Paper Prices

What can affect the price of paper?  
• Change in price of raw pulp  
• Paper mill closures/consolidations  
• Lack of mill capacity  
• Repurposing of mill equipment  
Paper accounts for approximately 21% of operating costs for the average printer, so any significant price changes can have a major impact on a firm's bottom line

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# Why?



Printers themselves have adjusted their business models to take account of new industry trends and realities.

Even the print sector most impacted by digital media, informational and editorial print (books, newspapers and magazines) has been doing relatively well.

Recently, print marketing and promotion, particularly direct mail, has demonstrated its effectiveness as a premium marketing and promotional media.

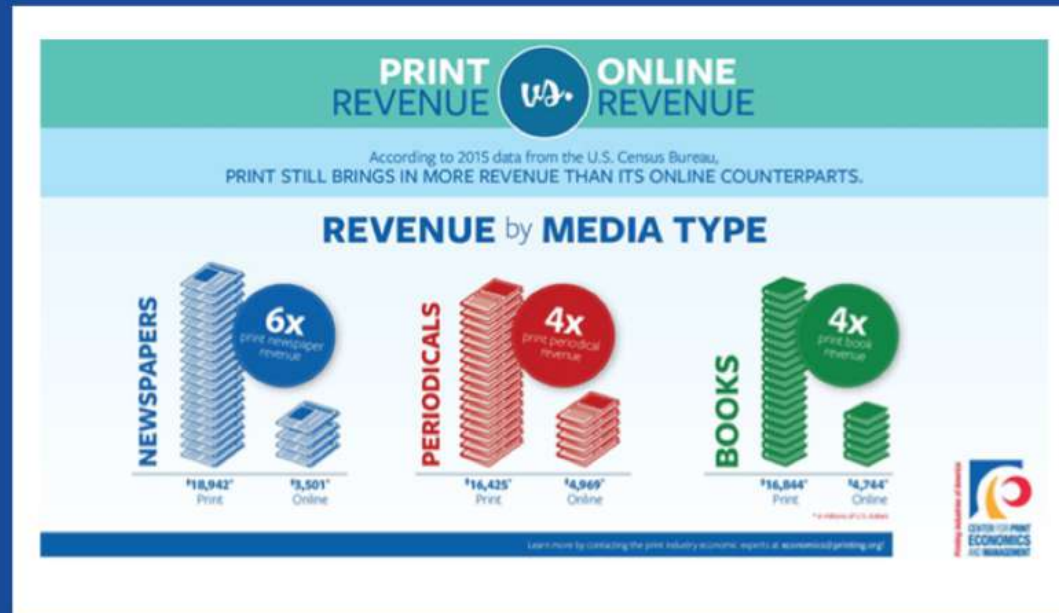


Print has hit its sweet spot in the mature recovery phase of the economy.

Most of the severe displacement of print by digital media is now behind us.

Labels, wrappers and packaging print, serves as an anchor on print sales as it generally tracks very closely with the overall economy.

# Print Still Dominates



More recent data also suggests that print is still responsible for 86% of news publisher revenue



## Print's 2018 Economic Footprint

### Shipments (\$ Millions)

Printing and Related Support Activities	\$83,319
Print Related Media	\$81,947
<b>Total Industry Shipments</b>	<b>\$165,266</b>

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### Establishments

Printing and Related Support Activities	26,187
Print Related Media	17,192
<b>Total Industry Establishments</b>	<b>43,379</b>

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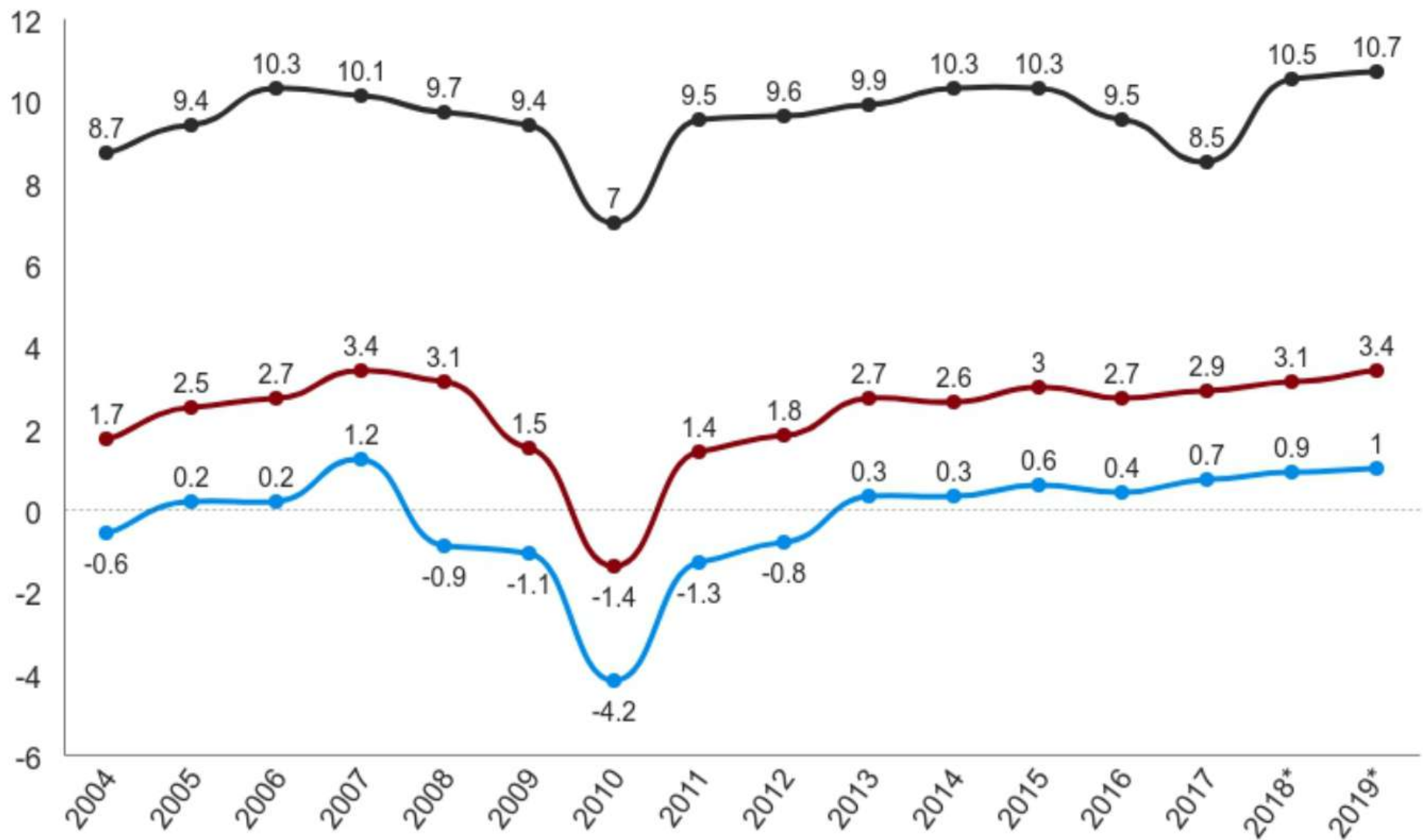
### Employment

Printing and Related Support Activities	458,799
Print Related Media	422,486
<b>Total Industry Employment</b>	<b>881,285</b>

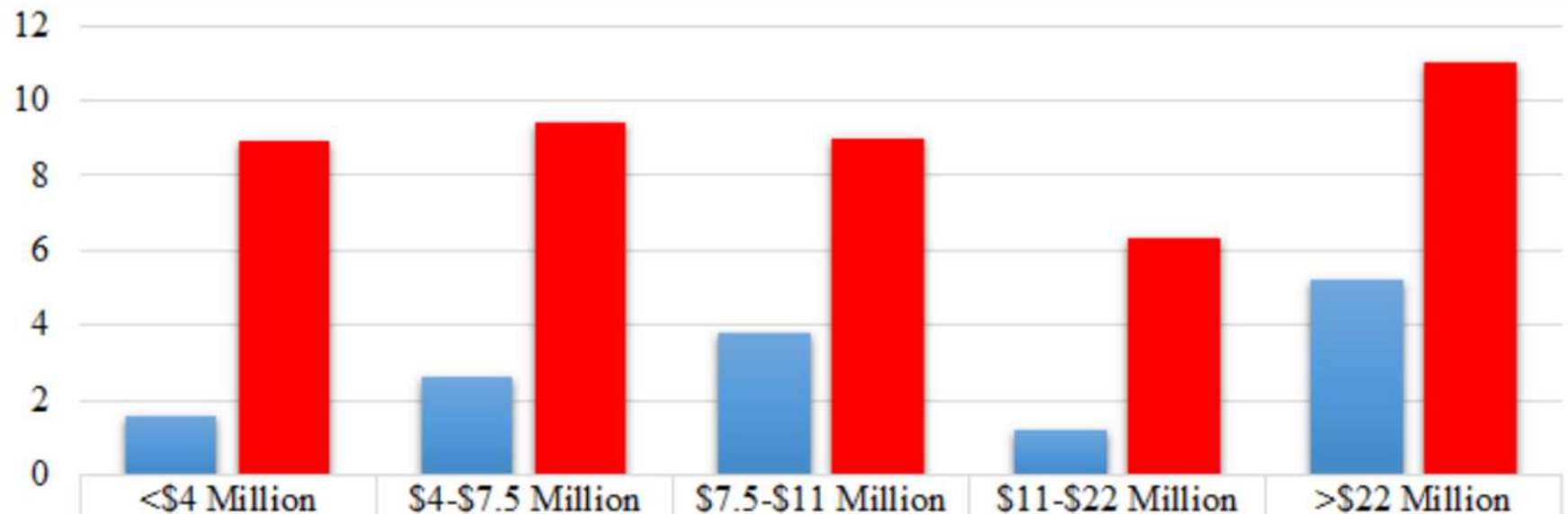
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Source: Print Market Atlas

# Industry Profitability



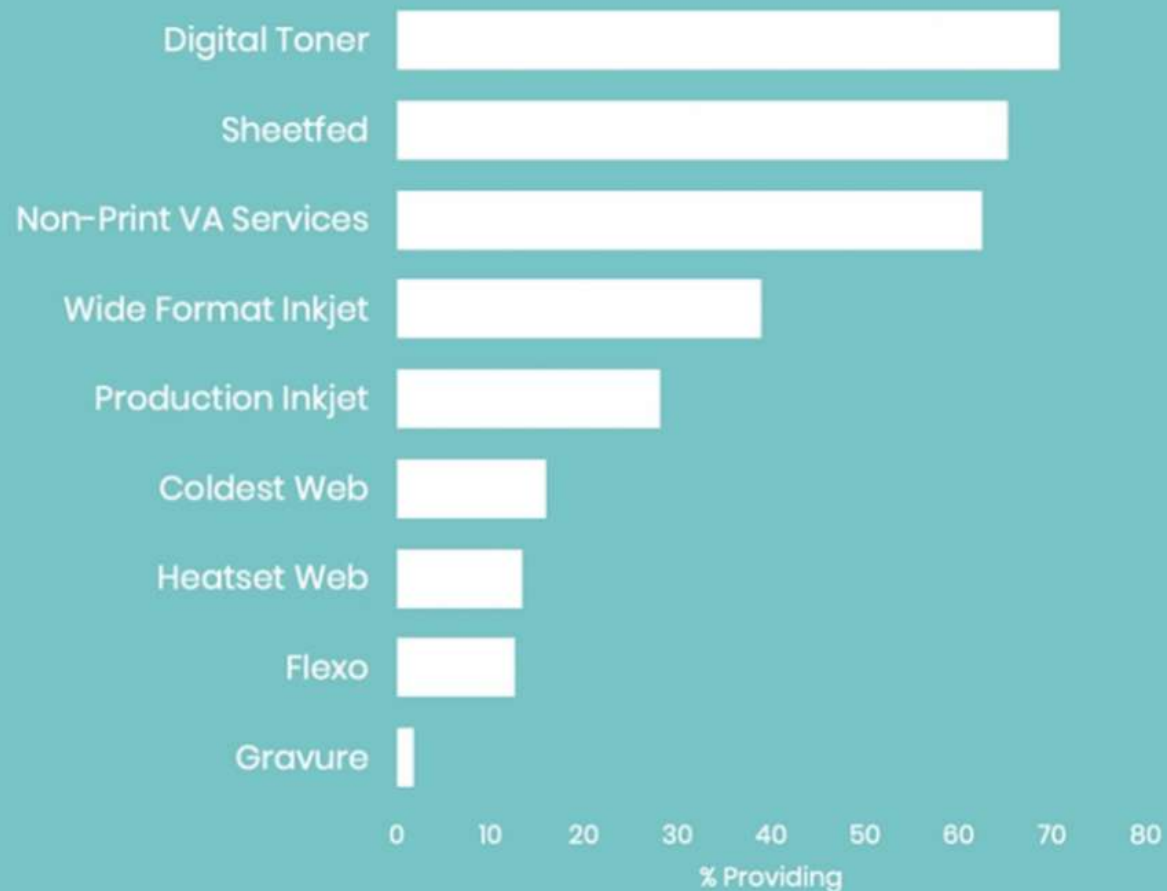
# Profit Rates By Sales Volume



All Printers	<\$4 Million	1.6	\$4-\$7.5 Million	2.6	\$7.5-\$11 Million	3.8	\$11-\$22 Million	1.2	>\$22 Million	5.2
Profit Leaders	<\$4 Million	8.9	\$4-\$7.5 Million	9.4	\$7.5-\$11 Million	9	\$11-\$22 Million	6.3	>\$22 Million	11

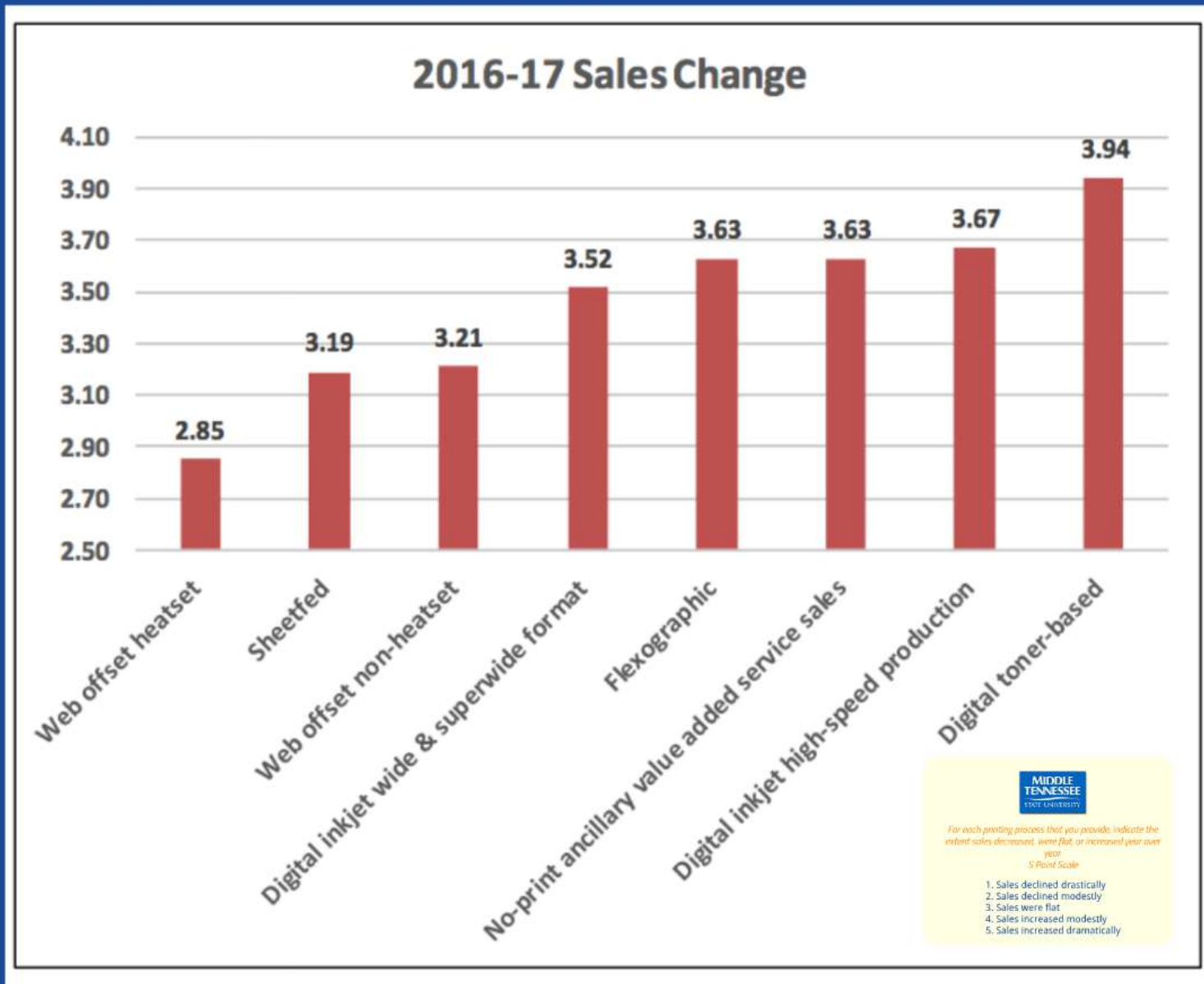
# Print Production

## Print Processes Provided by Printers





# Relationship Between Sales and Print Process



Source: Jones School of Business,  
Middle Tennessee State University

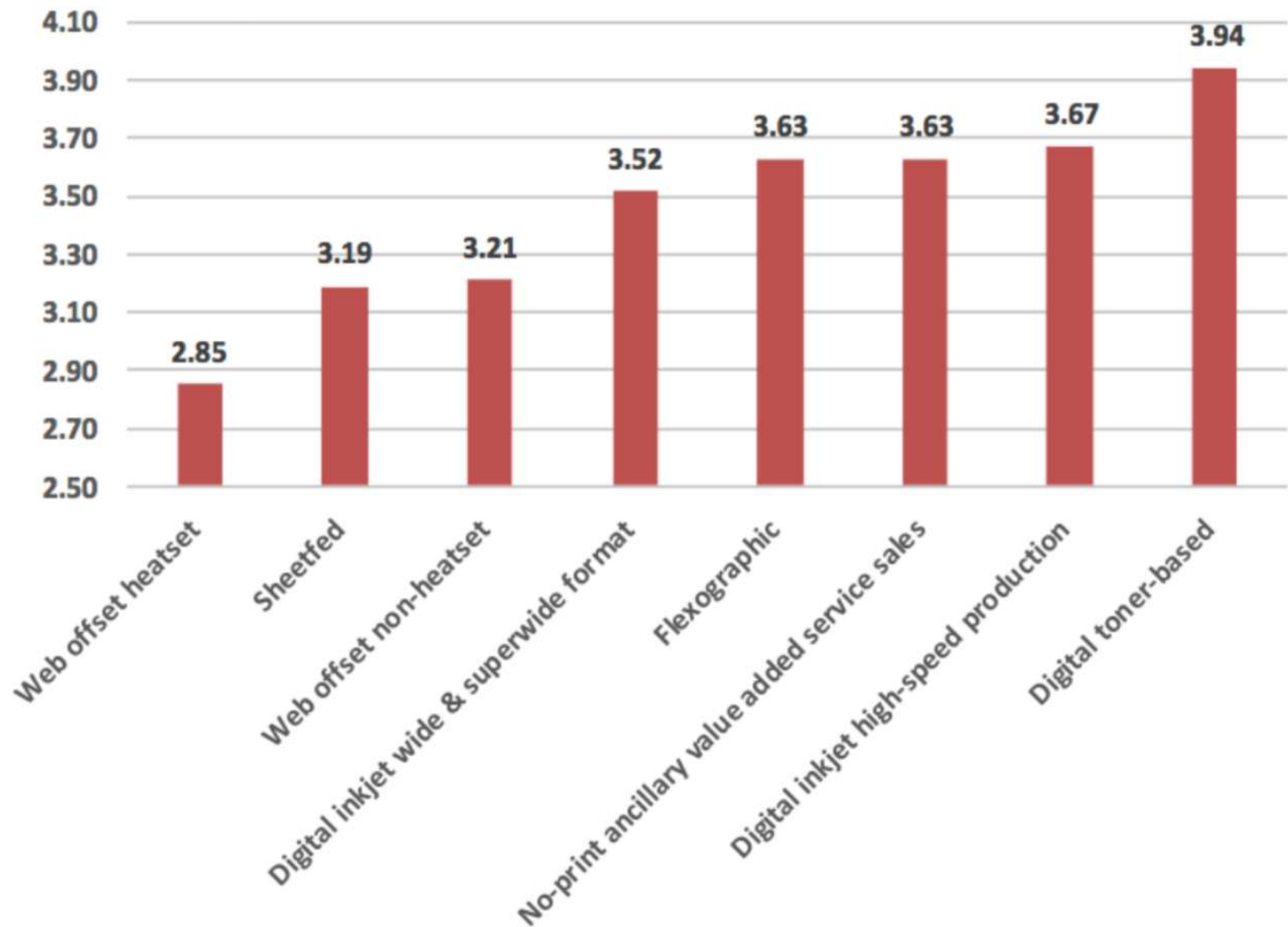


*For each printing process that you provide, indicate the extent sales decreased, were flat, or increased year over year.*

*5 Point Scale*

1. Sales declined drastically
2. Sales declined modestly
3. Sales were flat
4. Sales increased modestly
5. Sales increased dramatically

## 2016-17 Sales Change



# Top Products Provided By Printers

(Ranked by % of Printers Providing)

- |                                    |                               |  |
|------------------------------------|-------------------------------|--|
| 1 Direct Mail                      | 2 Brochures                   | 3 Pamphlets  |
| 4 Posters                          | 5 Business Cards              | 6 Catalogs & Directories                                 |
| 7 Stationery                       | 8 Inserts                     | 9 Signs (Business Signs, Banners, etc)                   |
| 10 Quick Printing                  | 11 Point of Purchase Displays | 12 Specialty Printing                                    |
| 13 Magazines and Periodicals       | 14 Business Forms Printing    | 15 Circulars   |
| 16 Book Printing                   | 17 Financial & Legal Printing | 18 Package Manufacturing (Converters, Envelope Printers) |
| 19 Food, Beverage & Related Labels | 20 Graphic Finishing          | 21 Greeting Cards  |
| 22 Trade Binding                   | 23 Household Labels           | 24 Pharmaceutical & Cosmetic Labels                      |
| 25 Personal Care Labels            | 26 Private Label Converting   | 27 Loose-Leaf Manufacturing                              |
|                                    | 28 Newspaper Printing         |  |



# Demand Perception For Products

1 Private Label Coverting	2 Signs (Business Signs, Banners, etc)	3 Pharmaceutical & Cosmetic Labels
4 Food, Beverage & Related Labels	5 Point of Purchase Displays	6 Household Labels
7 Package Manufacturing (Converters, Envelope Printers)	8 Specialty Printing	9 Direct Mail
10 Personal Care Labels	11 Quick Printing	12 Posters
13 Graphic Finishing	14 Brochures	15 Business Cards
16 Inserts	17 Pamphlets	18 Catelogs & Directories
19 Newspaper Printing	20 Book Printing	21 Circulars
22 Greeting Cards	23 Trade Binding	24 Magazines & Periodicals
25 Financial & Legal Printing	26 Loose-Leaf Manufacturing	27 Business Forms Printing
	28 Stationery	

Source: Jones School of Business  
Middle Tennessee State University

# Ancillary Services Provided

## Ranked by % of Printers Providing

**1**

Kit Fulfillment

**2**

Mailing  
Management

**3**

Professional Creative  
Design

**4**

Web-to-Print Style  
Storefront (Print  
Procurement)

**5**

Web-to-Print Style Storefront  
(Marketing/Brand  
Management, ETC.)

**6**

Database  
Management  
Services

**7**

Logistics  
Management

**8**

Digital Asset  
Management

**9**

Cross-Media Marketing  
Services or Support

**10**

Digital Database  
Archiving

**11**

CD/DVD Services

**12**

Digital Studio  
Photography

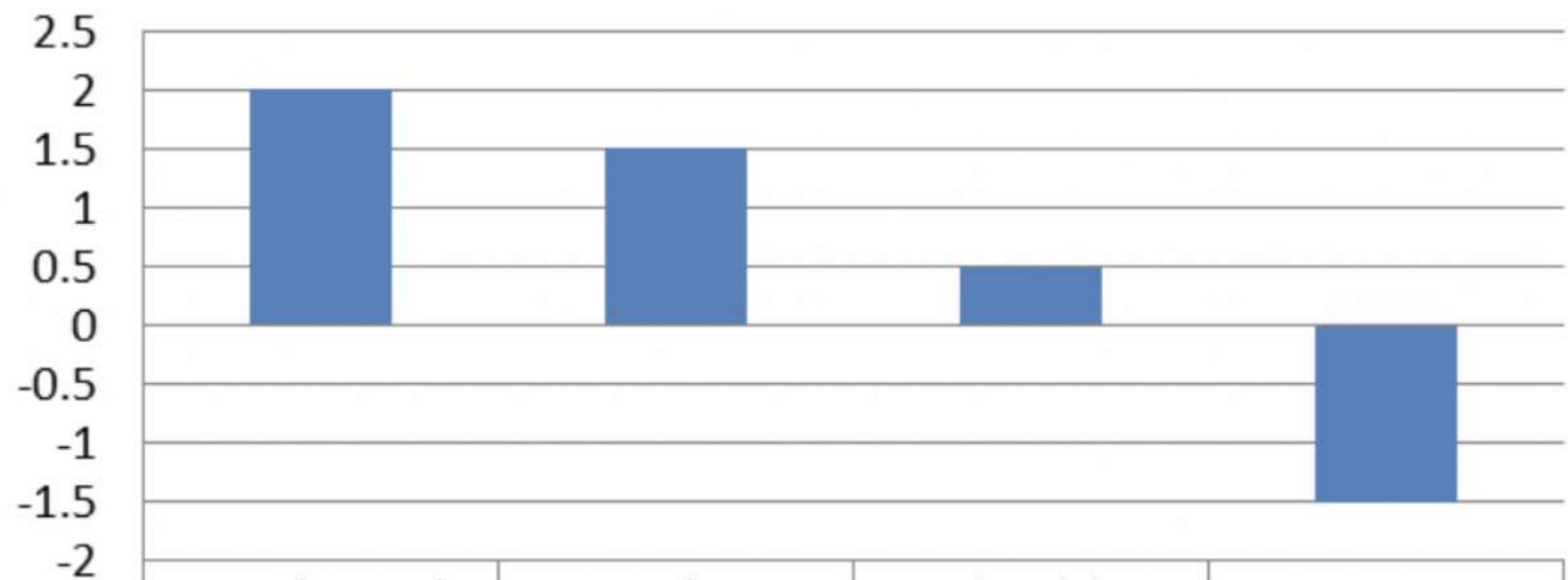
# Demand Perception For Ancillary Offerings

<b>1</b> Web-to-Print Style Storefront (Print Procurement)	<b>2</b> Kit Fulfillment
<b>3</b> Web-to-Print Style Storefront (Marketing/Brand Management, ETC.)	<b>4</b> Logistics Management
<b>5</b> Database Management Services	<b>6</b> Digital Asset Management
<b>7</b> Mailing Management	<b>8</b> CD/DVD Services
<b>9</b> Professional Creative Design	<b>10</b> Digital Database Archiving
<b>11</b> Digital Studio Photography	<b>12</b> Cross-Media Marketing Services or Support

Source: Jones Business School  
Middle Tennessee State University

# Print Scenarios 2020

## 2020 Print Markets and Economic Scenarios

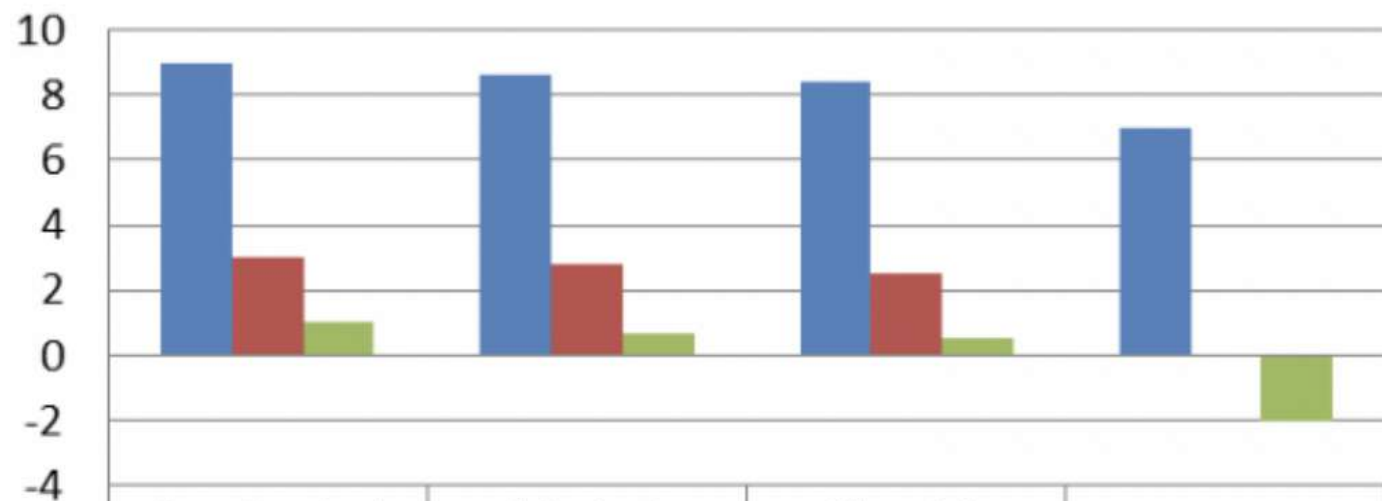


	Accelerated Growth	Modest Growth	Sluggish Growth	Recession
■ % Change	2	1.5	0.5	-1.5



# Profit Scenarios for 2020

## 2020 Printer Profits (% of Sales)



	Accelerated Growth	Modest Growth	Sluggish Growth	Recession
Profit Leader	9	8.6	8.4	7
All Printers	3	2.8	2.5	0
Challengers	1	0.7	0.5	-2

# Outlook By Print Processes



- Inkjet
- Wide format
- Digital/toner



# Hottest Markets

Pharmaceutical/Cosmetic Labels

**SIGNS**

Direct Mail

**SPECIALTY PRINTING**

Posters

Quick Printing

Private Label Convert.

Food/Beverage Labels

**PACKAGING/ENVELOPES**

Point of purchase

# Warm Markets



A word cloud of various printing services. The words are arranged in a cluster, with 'GRAPHIC FINISHING' and 'BROCHURES' being the largest. Other words include 'PERSONAL CARE LABELS', 'Household Labels', 'Inserts', 'Trade Binding', 'Greeting Cards', 'Pamphlets', and 'Business Cards'.

Household Labels  
PERSONAL CARE LABELS  
GRAPHIC FINISHING  
BROCHURES  
Inserts  
Trade Binding  
Greeting Cards  
Pamphlets  
Business Cards



# Cool Markets

A word cloud on a white rectangular background, set against a blue gradient background. The words are in various shades of blue and represent different market categories. The largest word is 'CIRCULARS'. Other prominent words include 'MAGAZINES', 'CATALOGS', 'Finance & Legal', 'Stationery', 'Business Forms', 'Newspapers', and 'Loose-leaf'.

CIRCULARS Stationery  
MAGAZINES Finance & Legal  
Business Forms  
Loose-leaf Newspapers CATALOGS

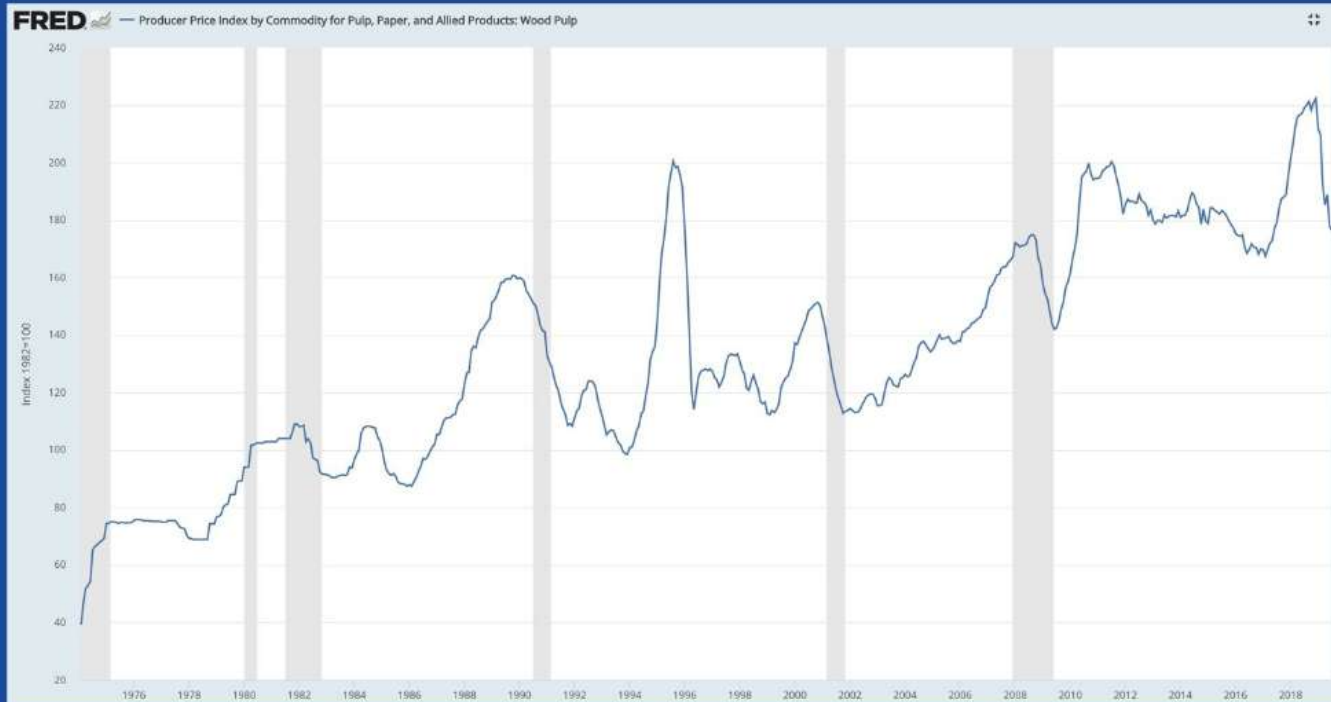
# Top Verticals

- Packaged Foods (\$19B)
- Medical/Pharma (\$16B)
- Publishing (\$11.4B)
- Telecomm (\$11B)
- Banking/Insurance (\$10.9B)
- Real Estate (\$10.5B)
- Travel/Hospitality (\$9.3B)
- Automotive \$8.2B)
- Food Service (\$8.2B)
- Home impr. (\$7.2B)



Source: Printing Impressions

# Paper Prices



- Price increased heavily to start 2019 but have been driven back down
  - Although it took a while, printers are finally beginning to see their raw material costs drop
- Up 24.7% between January 2017 and 2019

# Paper Prices

What can affect the price of paper?

- Change in price of raw pulp
- Paper mill closures/consolidations
- Lack of mill capacity
- Repurposing of mill equipment

Paper accounts for approximately 21% of operating costs for the average printer, so any significant price changes can have a major impact on a firm's bottom line



# Challenges & Opportunities

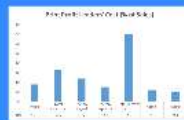
## Opportunity/Challenge #1 Be Strategic & Possible

- Thorough look under the hood
- Assets, equipment base, your talent, customers, margins, verticals
- Re-check your plans against your actions
- Plan for the worst but be ready to capitalize

## Strategic Focus

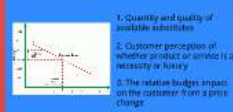
- Annual customer reviews?
- Ask for lies with the order?
- Are you monitoring the trade associations of the verticals you are working in?
- Social? - Resource?

## Cost Considerations in Pricing



## Customer Considerations in Pricing

Key Factors of Price Setting



## Managing ROP

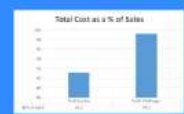


Formal strategic planning with goal setting with measurable metrics

## Opportunity/Challenge #2 Practice the 3 C's of Pricing

- Pricing one of the most difficult decisions managers have to make
- Too low and we leave money on the table
- Too high and we lose the business
- No cookie cutter solution for price

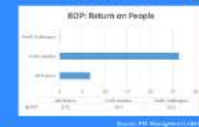
## Cost Considerations in Pricing



## How to Make Your Services Inelastic?

- Use more controls to give providers the better (barriers to exit)
- Control the data
- Work with capex there is elasticity customers (elastic/elastic)
- Include customer on those to target for price increase
- Start small and evaluate results
- Some suggest commodity/low price for market (subsequent - 100 ROP)

## Return On People



## Managing By ROP

- Track on a regular basis
- Focus on increasing your ROP (Revenue/Revenue) - profit margin - or decrease denominator - people cost (as a % of sales)
- Managing the denominator
- The Sales ROP Model

## Strategic Focus

- Analysis on best customers
- Internal case studies of what makes them great
- How can they be replicated in standardize verticals with similar business plans
- Which are elastic and inelastic?

## 3 C's of Pricing



## Cost Considerations in Pricing



## Competition Considerations in Pricing

- Know your competition strengths, weaknesses, offerings, tactics
- When potential customers are elastic in demand?
- Research your competitor's competition, particularly price leaders
- Know advantages of each

## Return On People



## Summary

- The ongoing mission to grow like manufacturing has for a better home in the road
- You need to prepare the growing firm by being as efficient as possible within your company
- Because you control the 3 C's of pricing within your operation (cost, customer and competition)
- Manage the Return of your People (ROP), your greatest asset

## Strategic Focus

- Revise credit policies
- Clearer expectations
- Improved workflow
- Demanding/abusive of your team
- Documentation can be illuminating

## Cost Considerations in Pricing

- Start with the right MS system so you can cost and track your jobs (MSA Survey)
- Price/Margin Chart of Accounts effective cost tracking system
- Margin profile (discount cost) (as a % of sales) for more than 100 line items
- Focus on Profit Leaders and Challengers - Profit per line 3 percent of sales in 2017

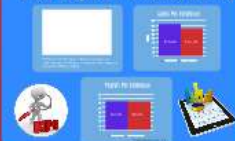
## Customer Considerations in Pricing

- Many partners price their work the same as they do their customer, not taking into consideration that different customers have different price elasticity of demand
- Price elasticity is a fancy economic term for price sensitivity
- The formula for price elasticity of demand is the % change in quantity demanded that results from a 1% price change
- If % change in quantity demanded is greater than the % change in price the demand is elastic - if the reverse applies it is inelastic

## Challenge/Opportunity #3 Manage Your Own Return on People

- People costs - 40% of sales for typical prices
- Profit leaders score significantly better
- Managing people accounts for more than half of the gap in profitability

## Other People Performance Metrics



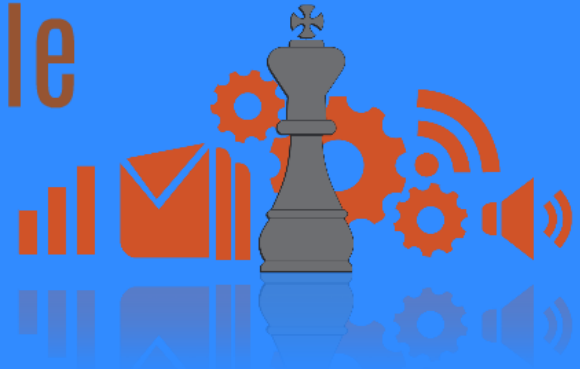
## Questions

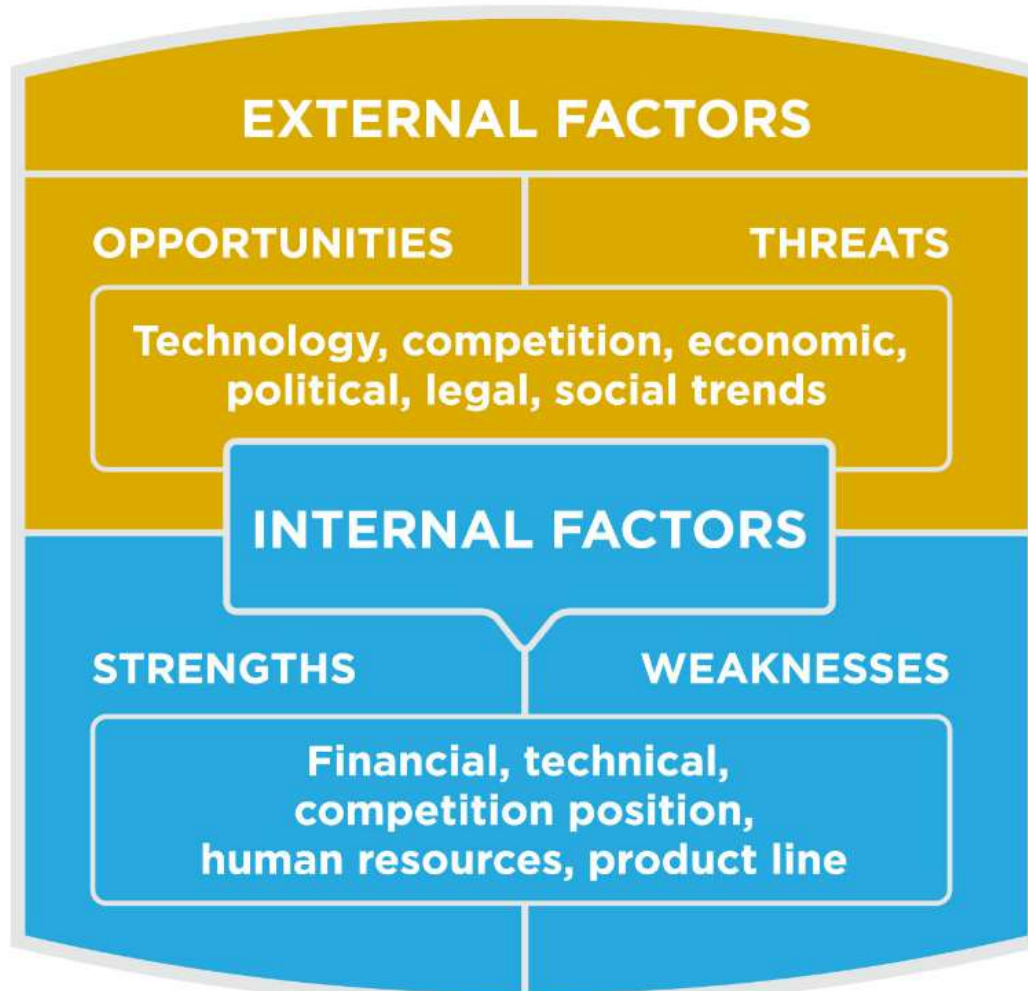


# Opportunity/Challenge #1

## Be Strategic As Possible

- Thorough look under the hood
- Assets, equipment base, your talent, customers, margins, verticals
- Re-check your plans against your actions
- Plan for the worst but be ready to capitalize





Formal  
strategic  
planning with  
goal setting  
with  
measurable  
metrics

# Strategic Focus

- Analytics on best customers
- Internal case studies of what makes them great
- How can they be replicated in identifiable verticals with concrete business plans
- Which are elastic and inelastic?





# Strategic Focus

- Revise credit policies
- Clearer expectations
- Improved workflow
- Demanding/abusive of your team
- Documentation can be illuminating



# Strategic Focus

- Annual customer reviews?
- Ask for fries with the order?
- Are you monitoring the trade associations of the verticals you are working in?
- Social?
- Resource?



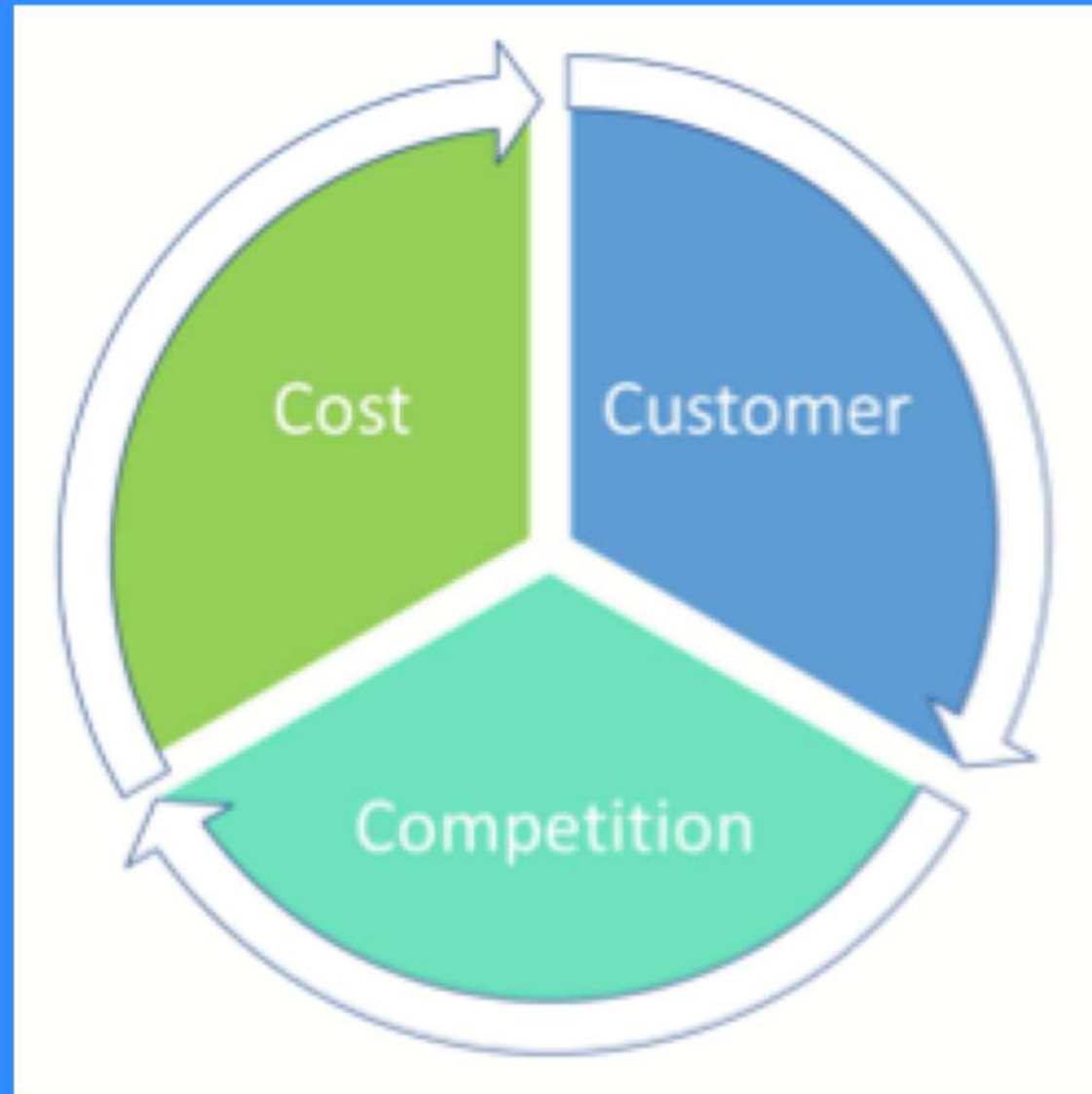
# Opportunity/Challenge #2

## Practice the 3 C's of Pricing



- Pricing one of the most difficult decisions managers have to make
- Too low and we leave money on the table
- Too high and we lose the business
- No cookie cutter solution for print

# 3 C's Of Pricing





# Cost Considerations In Pricing

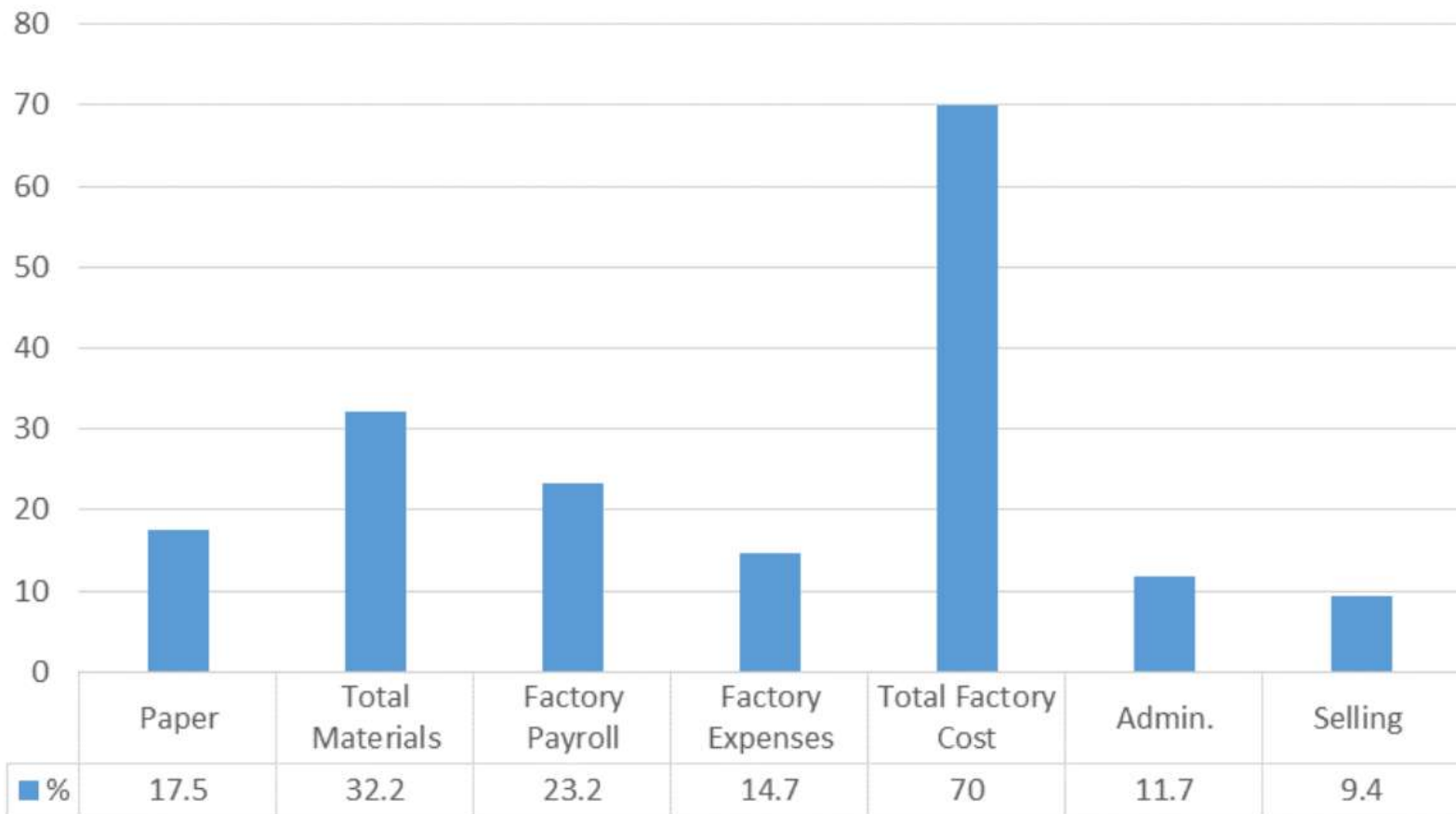


- Start with the right MIS system so you can cost and track your jobs (PIA Survey).
- PIA's Ratios Chart of Accounts effective cost tracking system
- Ratios provide detailed cost metrics (% of sales) for more than 100 line items
- Focus on Profit Leaders not challengers. Profit gap was 9 percent of sales in 2017

# Cost Considerations In Pricing



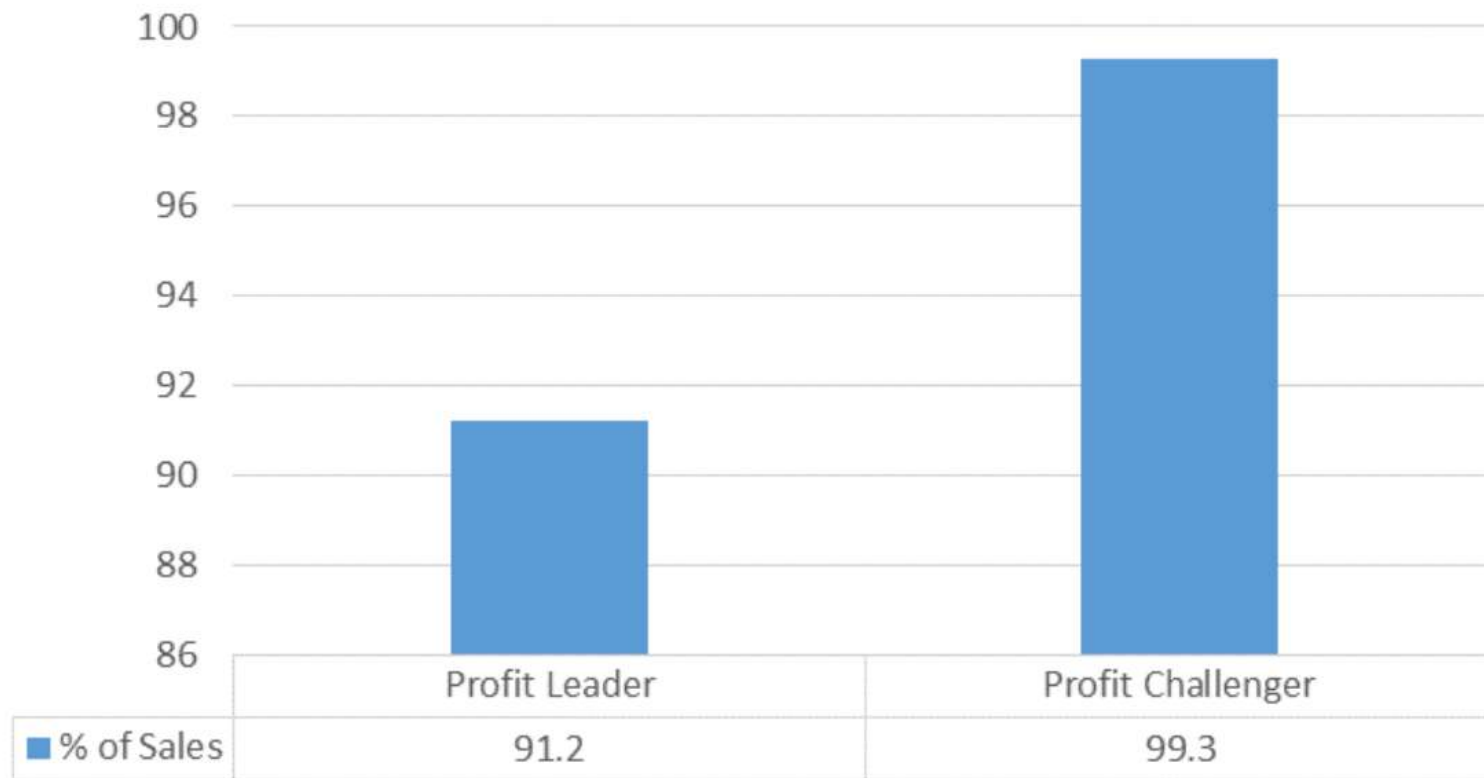
**Print Profit Leaders' Cost (% of Sales)**



# Cost Considerations In Pricing



**Total Cost as a % of Sales**

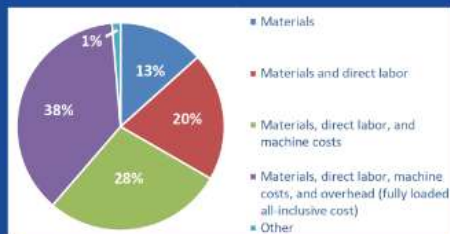


# Cost Considerations In Pricing



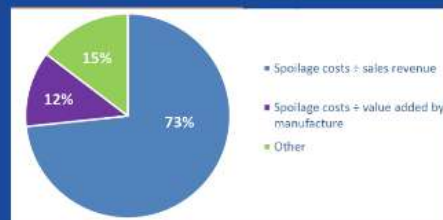
- Lower your cost relative to your competitors, the greater pricing flexibility you have
- Lean Manufacturing (TQM, 5S, I-Learning Center)
- CI Conference April 14-17, 2019 Dallas
- Minimize waste and spoilage

## Defining Spoilage



Source: 2018 Spoilage Survey

## Determining Spoilage Rate



Source: 2018 Spoilage Survey

## Spoilage Results Highlights



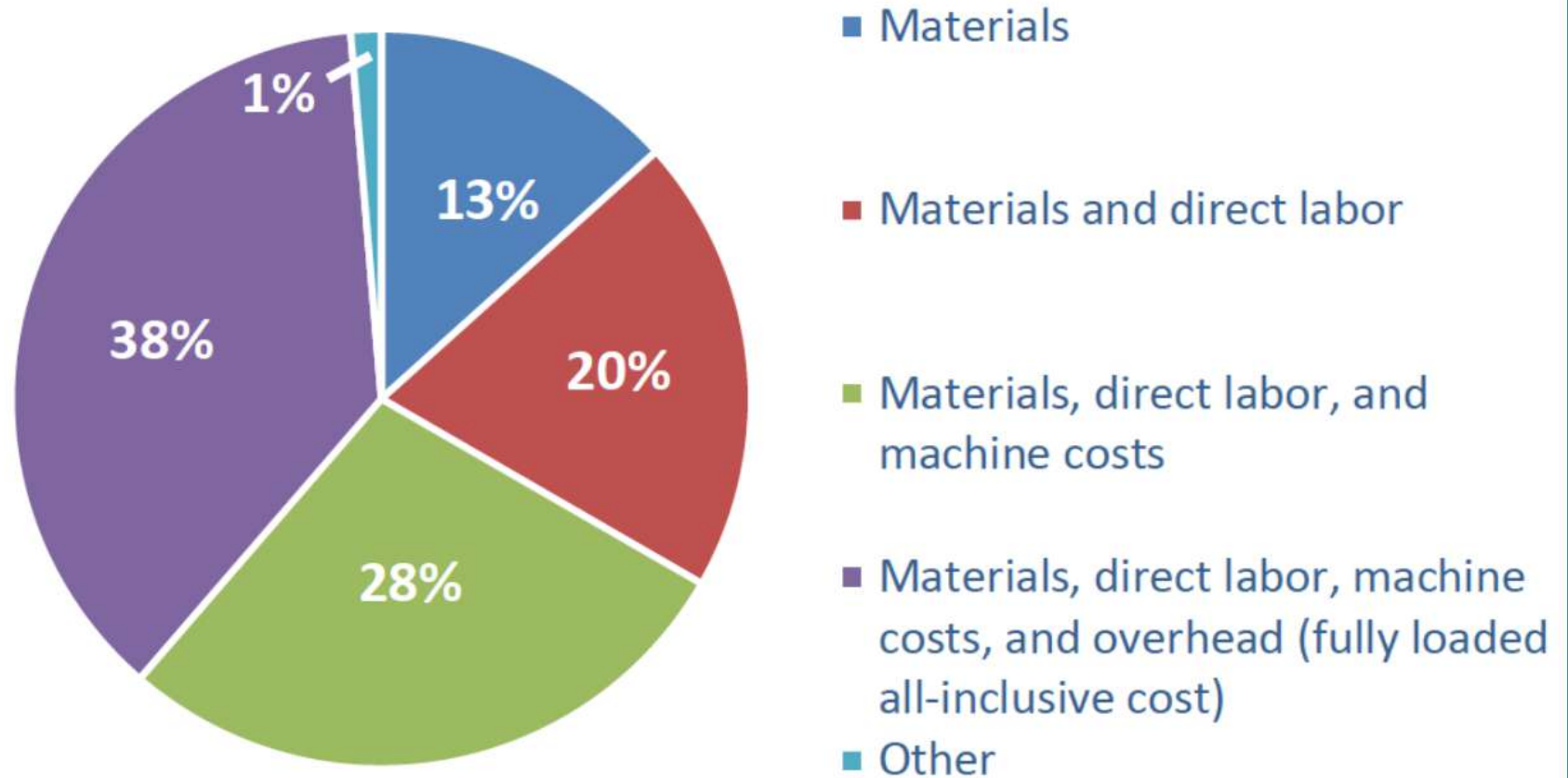
- 75 % of printers track spoilage
- Average spoilage rate is 2.3 percent of sales
- Smaller printers have higher spoilage rates than larger
- Profit leaders and those with spoilage rates less than two percent are more likely to:
  - Track the causes of spoilage/by cost center
  - More likely to track every incident of spoilage, no matter how small



Source: 2018 PIA Spoilage Survey

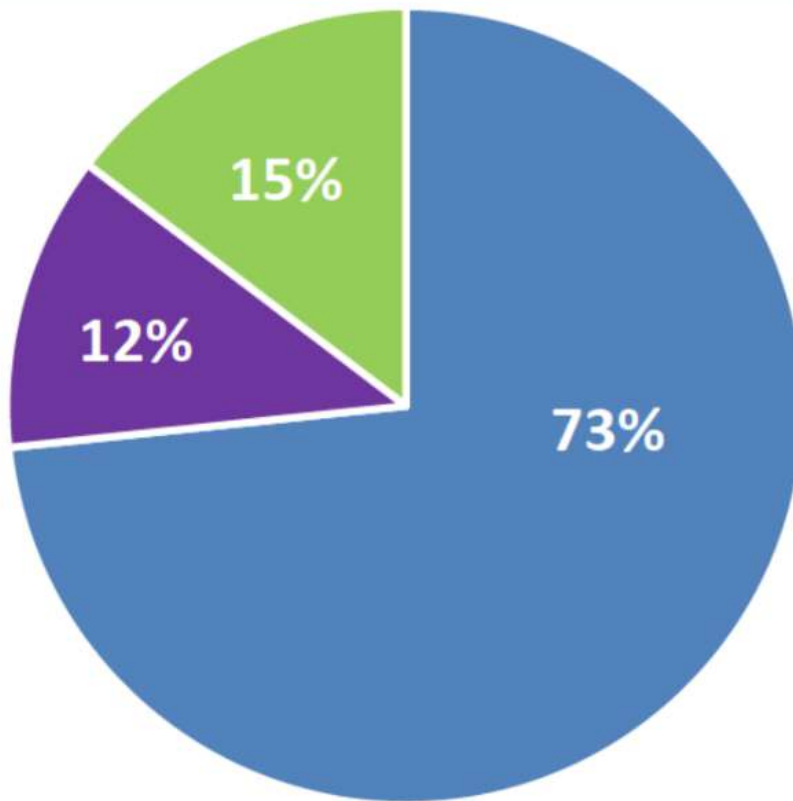


# Defining Spoilage



Source: 2018 Spoilage Survey

# Determining Spoilage Rate



- Spoilage costs ÷ sales revenue
- Spoilage costs ÷ value added by manufacture
- Other

Source: 2018 Spoilage Survey

# Spoilage Results Highlights



- 75 % of printers track spoilage
- Average spoilage rate is 2.3 percent of sales
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Source: 2018 PIA Spoilage Survey

# Customer Considerations In Pricing



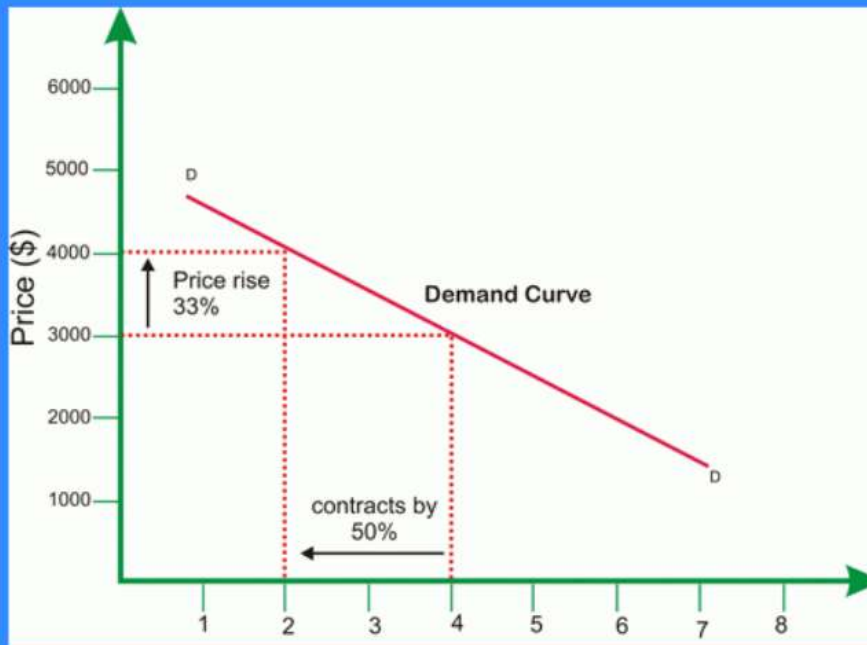
- Many printers price their work the same no matter who the customer is, not taking into consideration that different customers have different price elasticities of demand.
- Price elasticity is a fancy economist term for price sensitivity.
- The formula for price elasticity of demand is the % change in quantity demanded that results from a given price change.
- If % change in quantity demanded is greater than the % change in price the demand is elastic. If the reverse applies it is inelastic



# Customer Considerations In Pricing



## Key Factors of Price Elasticity



1. Quantity and quality of available substitutes
2. Customer perception of whether product or service is a necessity or luxury
3. The relative budget impact on the customer from a price change



# How To Make Your Services Inelastic?

- The more services you provide the better (barriers to exit)
- Control the data
- Work with sales force to classify customers (elastic/inelastic)
- Inelastic customers are those to target for price increase
- Start small and evaluate pushbacks
- Some suggest conversely lower prices for elastic customers - **I DO NOT**

## Best Way To Boost Profitability

Before Price Increase			After Price Increase		
<b>Assumptions</b>			<b>Assumptions</b>		
Cost of good sold	\$7.50		Cost of good sold	\$7.50	
Selling price	\$10.00		Selling price	\$10.50	
Number of units sold	100,000		Number of units sold	100,000	
Sales/Admin	\$200,000		Sales/Admin	\$200,000	
Annual LTD interest	8%		Annual LTD interest	8%	
Total assets	\$1,000,000		Total assets	\$1,000,000	
% of debt financing	50%		% of debt financing	50%	
<b>Income Statement</b>			<b>Income Statement</b>		
Revenue	\$1,000,000.00		Revenue	\$1,050,000.00	Change in Sell Price 5.00%
COGS	\$750,000.00		COGS	\$750,000.00	Change in Revenue 5.00%
Gross Profit	\$250,000.00	Return on Equity 12.00%	Gross Profit	\$300,000.00	Change in Profit 20.00%
Sales/Admin	\$200,000		Sales/Admin	\$200,000	
Operating profit	\$50,000.00		Operating profit	\$100,000.00	
Interest	\$40,000		Interest	\$40,000	
Net Profit Before Tax	\$10,000.00		Net Profit Before Tax	\$120,000.00	

# Best Way To Boost Profitability

## Before Price Increase

### Assumptions

Cost of good sold	\$7.00
Selling price	\$10.00
Number of units sold	100,000
Sales/Admin	\$200,000
Annual LTD interest	8%
Total assets	\$1,000,000
% of debt financing	50%

### Income Statement

Revenue	\$1,000,000.00
COGS	\$700,000.00
Gross Profit	\$300,000.00

Sales/Admin	\$200,000
Operating profit	\$100,000.00

Interest	\$40,000
Net Profit Before Tax	\$60,000.00

Return on Equity 12.00%

## After Price Increase

### Assumptions

Cost of good sold	\$7.00
Selling price	\$10.50
Number of units sold	100,000
Sales/Admin	\$200,000
Annual LTD interest	8%
Total assets	\$1,000,000
% of debt financing	50%

### Income Statement

Revenue	\$1,050,000.00
COGS	\$700,000.00
Gross Profit	\$350,000.00

Sales/Admin	\$200,000
Operating profit	\$150,000.00

Interest	\$40,000
Net Profit Before Tax	\$110,000.00

Change in Sell Price	5.00%
Change in Revenue	5.00%
Change in Profits	83.33%
Return on Equity	22.00%

# Competition Considerations In Pricing



- Know your competition (strengths, weaknesses, strategies tactics)
- What potential customers are elastic to pursue?
- Benchmark yourself against your competition, particularly profit leaders
- Take advantage of tools



- Ratios
- Profit Booster (customized analysis and plan to improve \$)
- PerformanceRatios.com



- Ratios
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# Challenge/Opportunity #3

## Manage Your ROP: Return on People



- People costs - 40% of sales for typical printer
- Profit leaders score significantly better
- Managing people accounts for more than half of the gap in profitability

# Managing ROP



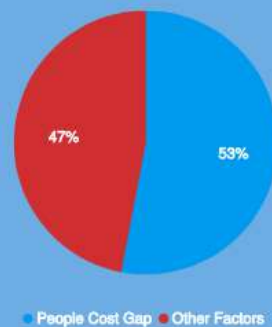
People Cost % Sales



People Profit Gap: Profit Per Employee



Sources of Profit Gap



Measuring ROP

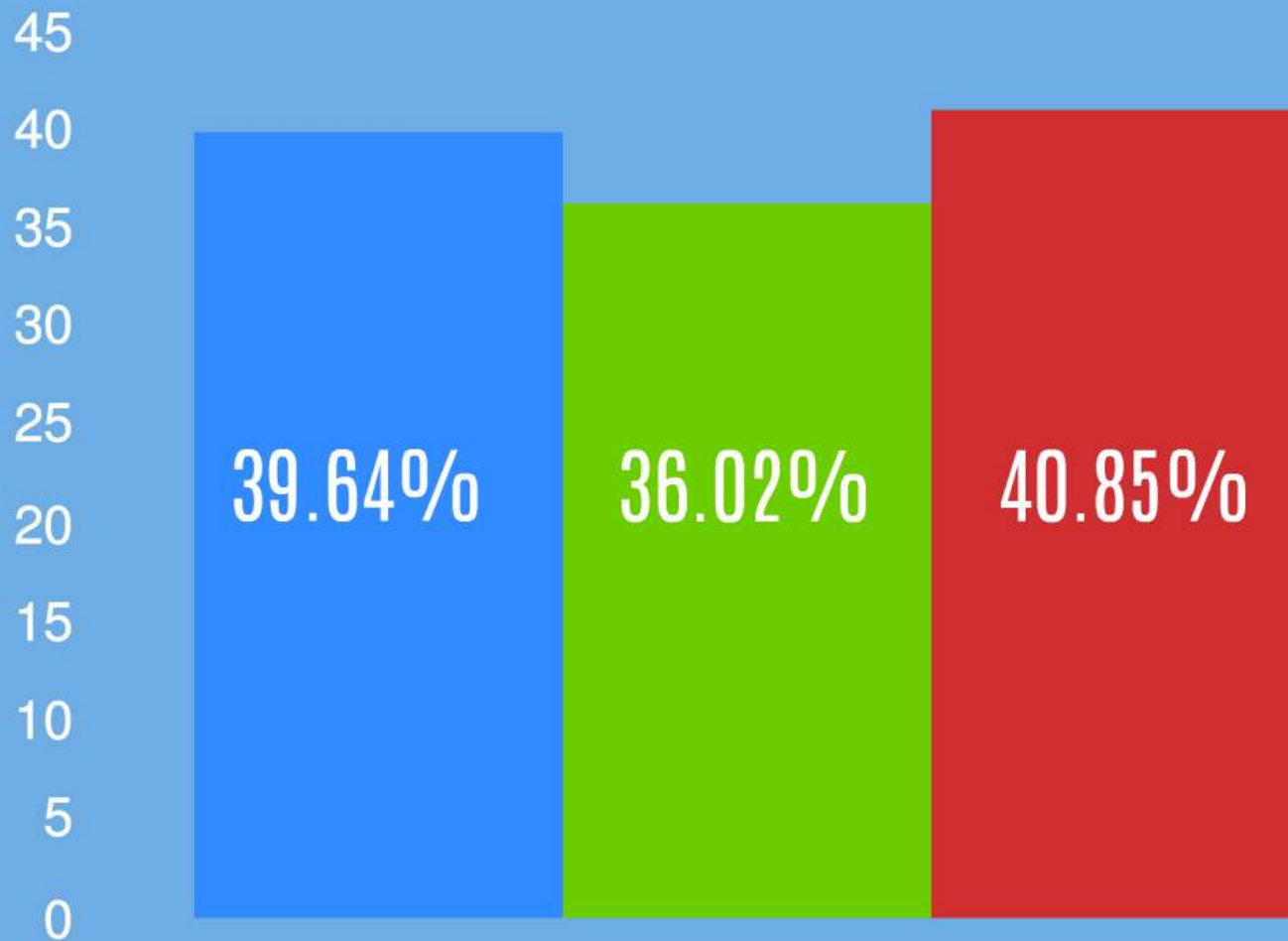


$$\text{ROP} = \frac{\text{Before Tax Profit Margin on Sales \%}}{\text{Total wages, salaries, benefits, payroll taxes as a \% of Sales}}$$

OR

$$\text{ROP} = \frac{\text{Before Tax Dollar Profits}}{\text{Total Dollar Costs of Wages, Salaries, Benefits and Payroll Taxes}}$$

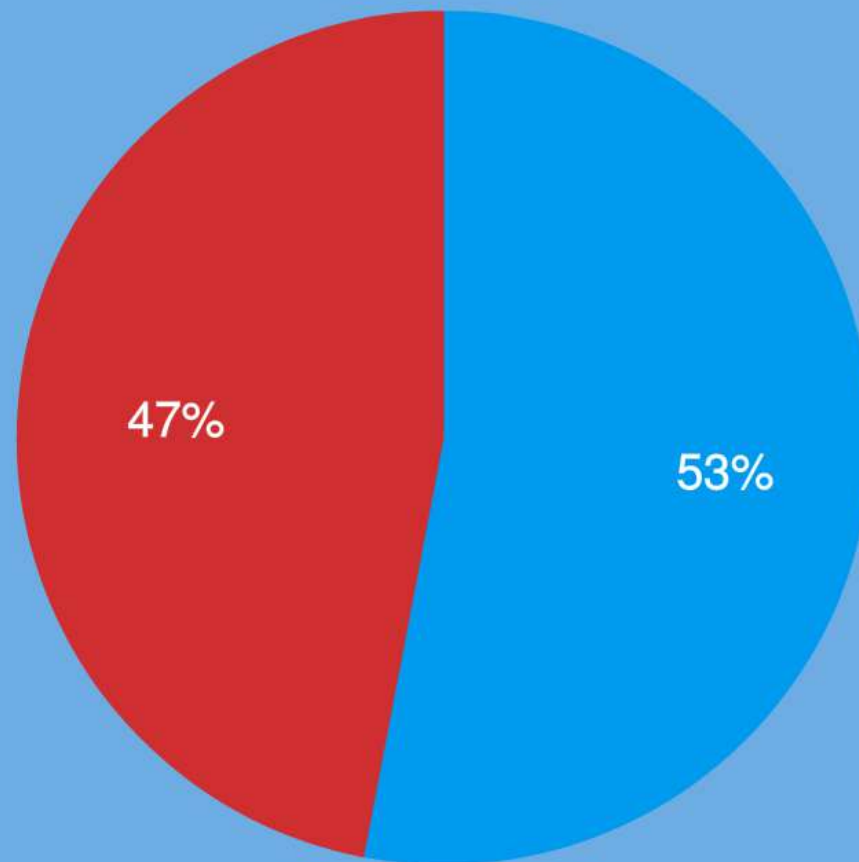
# People Cost % Sales



● All Printers ● Profit Leaders ● Profit Challengers



# Sources of Profit Gap



● People Cost Gap ● Other Factors

# People Profit Gap: Profit Per Employee



**Profit per Employee**



# Measuring ROP



$$\text{ROP} = \frac{\text{Before Tax Profit Margin on Sales \%}}{\text{Total wages, salaries, benefits, payroll taxes as a \% of Sales}}$$

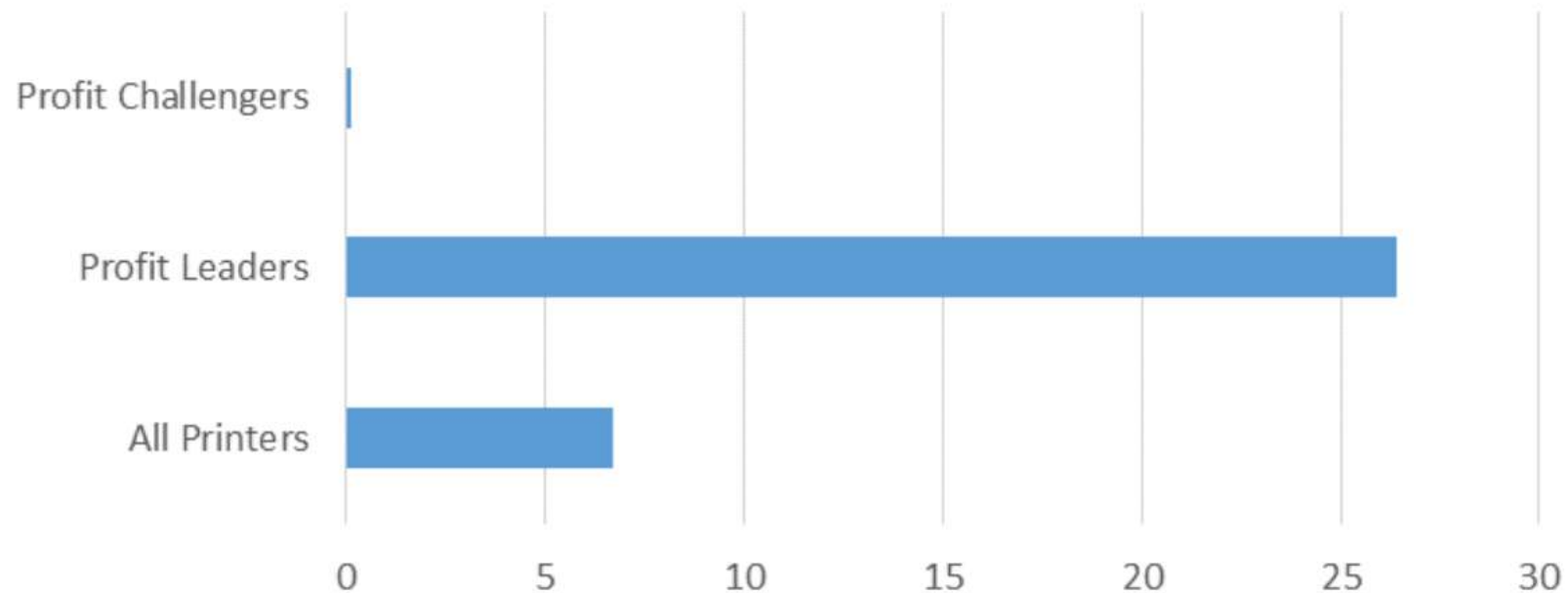
OR

$$\text{ROP} = \frac{\text{Before Tax Dollar Profits}}{\text{Total Dollar Costs of Wages, Salaries, Benefits and Payroll Taxes}}$$

# Return On People



## ROP: Return on People



	All Printers	Profit Leaders	Profit Challengers
ROP	6.71	26.4	0.15

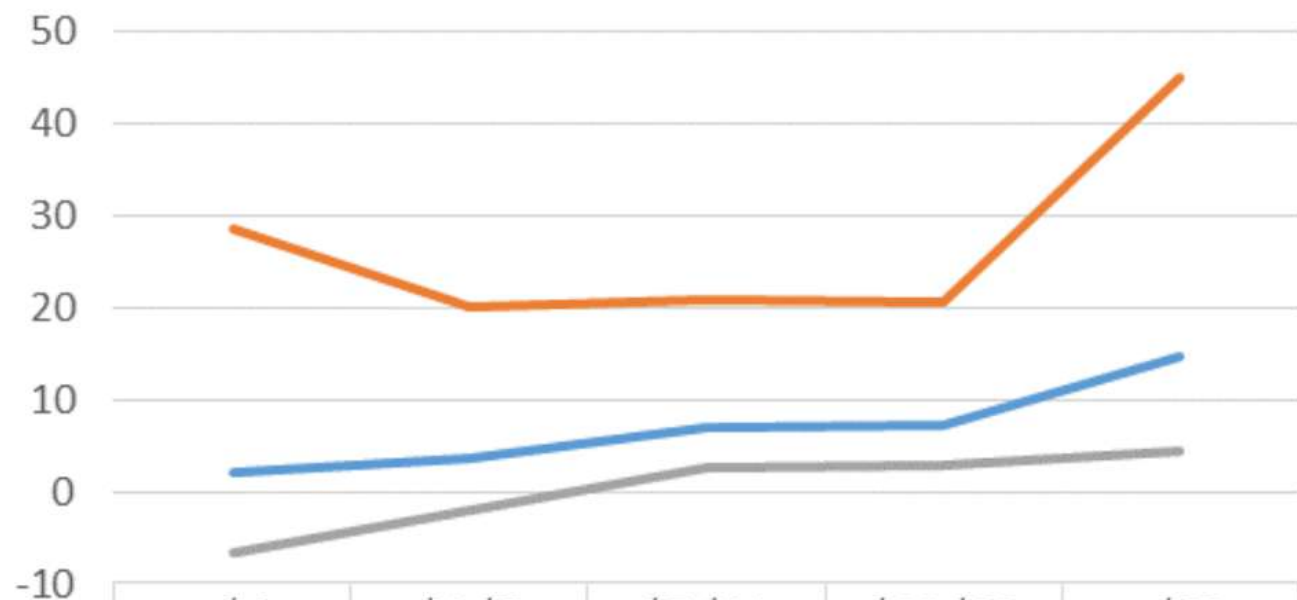
Source: PIA Management Alert



# Return On People



## ROP by Annual Sales



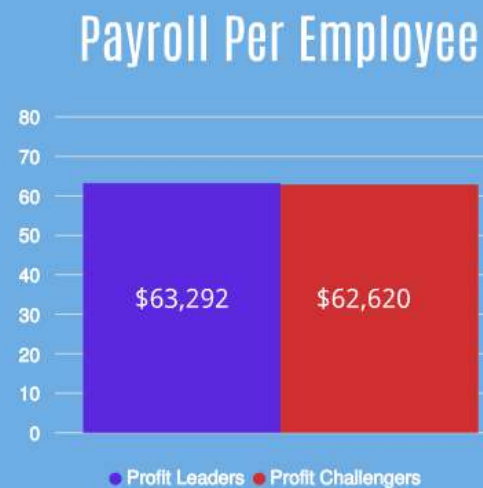
	<\$4	\$4-\$7	\$7-\$11	\$11-\$22	>\$22
All	2.11	3.53	7.05	7.25	14.75
Profit Leaders	28.47	20.17	20.87	20.61	44.95
Profit Challengers	-6.78	-2.01	2.53	2.8	4.5

Source: PIA Management Alert

# Other People Performance Metrics



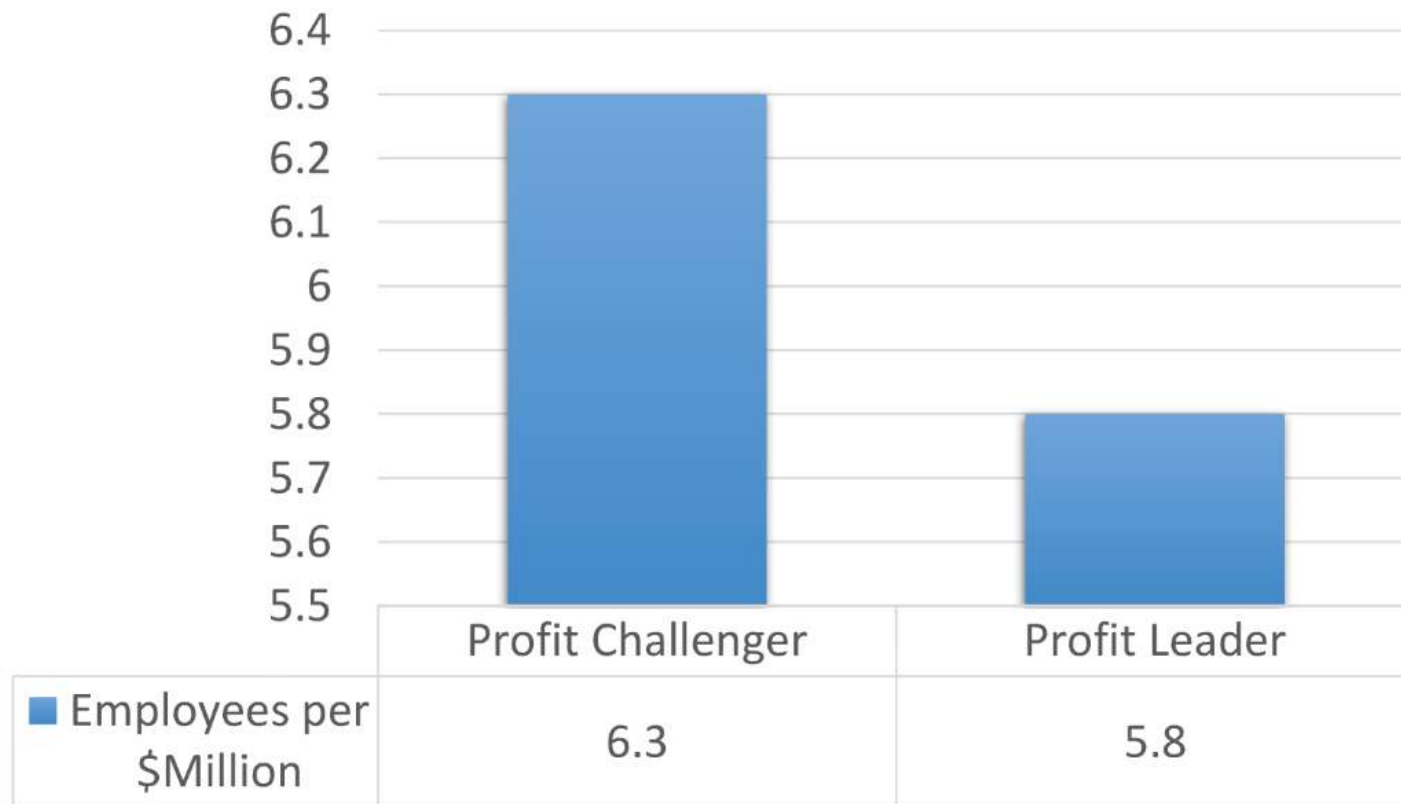
- Profit leaders have about a two percentage point advantage over challengers in terms of direct wages as a percent of factory payroll



\* Includes benefits & Payroll Taxes



## Employees per \$1 Million in Sales



- Profit leaders have about a two percentage point advantage over challengers in terms of direct wages as a percent of factory payroll

# Sales Per Employee





# Payroll Per Employee



\* Includes benefits & Payroll Taxes

# Managing By ROP



- Track on a regular basis
- Focus on increasing your ROP (increase numerator - profit margin - or decrease denominator - people cost as a % of sales)

## Decreasing The Denominator

Evaluate headcounts:

- Are these full-time positions or could they be combined with other positions?
- Can positions be eliminated by automation?
- Are these positions crucial to core products and services?
- Better to have higher rates of pay for fewer people
- Tight markets may have to pay more/lose people
- Be creative (flex time etc.)

## Think Outside ROP Equation



- Invest in machinery, equipment and software
- Invest in education and training



# Decreasing The Denominator



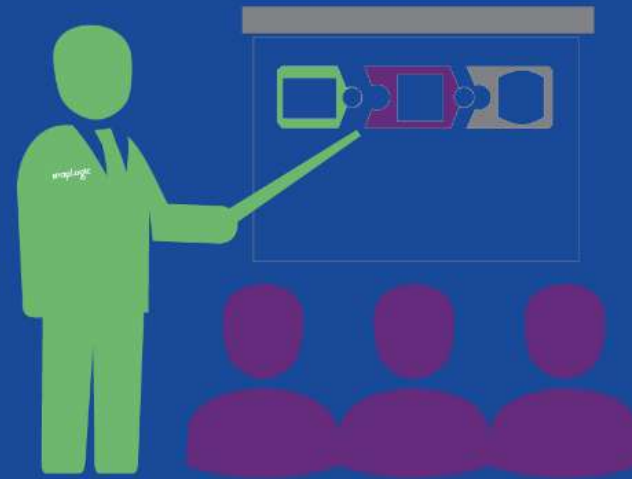
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# Think Outside ROP Equation



- Invest in machinery, equipment and software
- Invest in education and training





# Summary



- The economy continues to grow but manufacturing has hit a minor bump in the road
- You need to prepare for slowing times by being as strategic as possible within your company
- Ensure you examine the 3Cs of pricing within your operation
  - cost, customers and competition
- Manage the Return of your People (ROP), your greatest asset

# Questions





# Thank You

Michael Makin

Email: [mmakin@printing.org](mailto:mmakin@printing.org)

Telephone: 412-259-1777



mmakinprint

# State of the printing industry

Michael Makin

President & CEO

