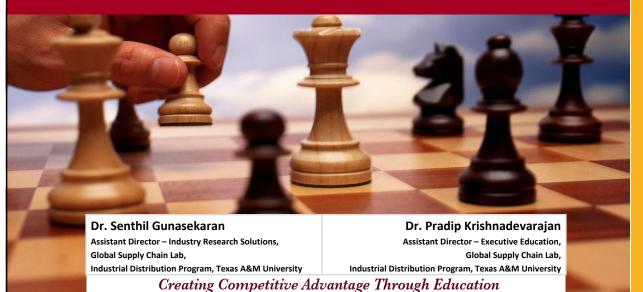
#### OPTIMIZING DISTRIBUTOR PROFITABILITY PRESENT & FUTURE

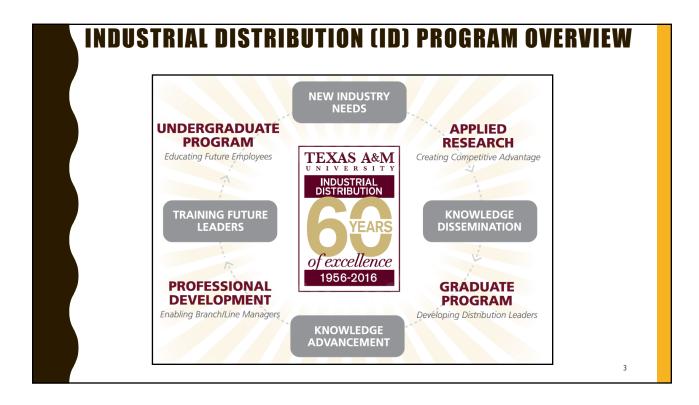


#### **Contact Information**

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#### • Dr. Pradip Krishnadevarajan

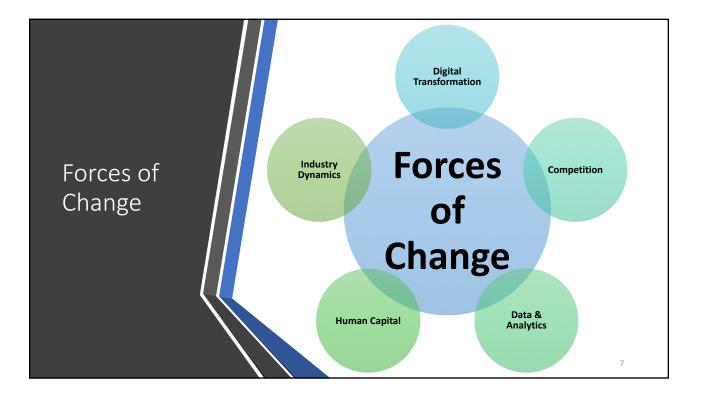
- Pradip@tamu.edu
- kpradipk@gmail.com

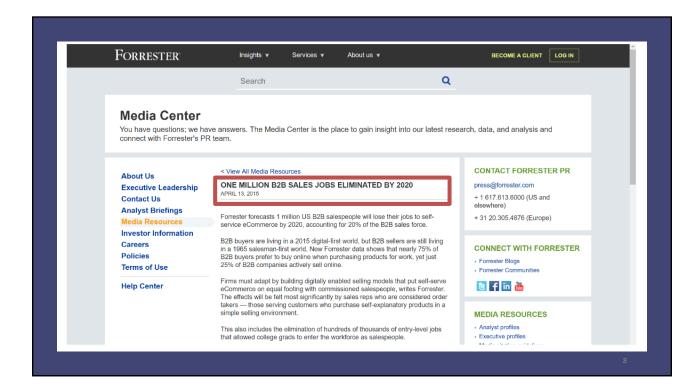


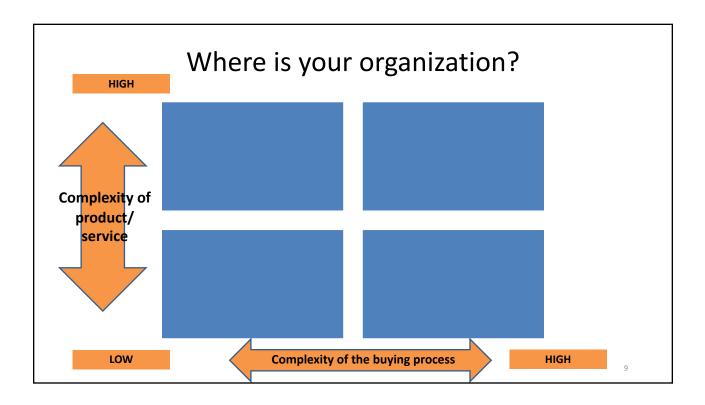


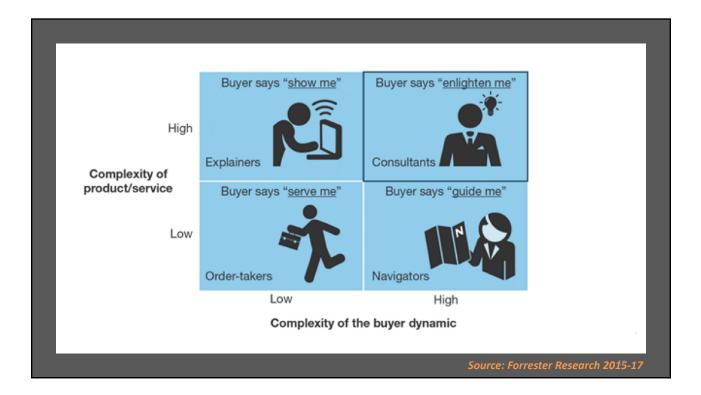


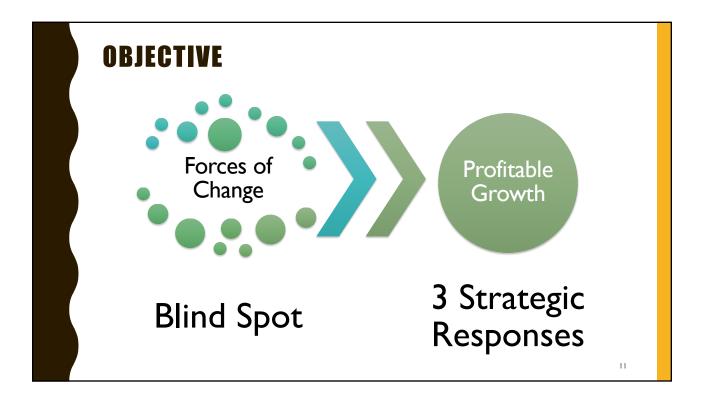
	DIGTRIPUTION	OLIENT	PR	OJECT OUTC	OME
PROJECT AREA	DISTRIBUTION CHANNEL	CLIENT REVENUE	Inventory Reduction/ Re-deployment	Service Level	Operating Cost
	Metals	\$ 1 Billion	() 17%		
	Pipe, Valve and Fitting	\$ 1 Billion	12%	<b>()</b> 7%	
nventory	Oil & Gas Equipment Mfg.	\$ 1 Billion	20%	6%	
Stratification	Paper Manufacturing	\$ 220 MM	(3) 10%	<ul><li>3%</li></ul>	
	Hardware	\$ 125 MM	35%	<ul><li>3%</li></ul>	
	Fluid Power Equipment	\$ 125 MM	<b>()</b> 33%	6 🚯	
	Building Materials	\$ 80 MM	<b>()</b> 22%	<ul><li></li></ul>	
	Building Materials		0 20%	6%	😗 10%
Network				<ul><li>33%</li></ul>	
Optimization			Strategic Facility I		
	Cutting Tool Manufacturing		Strategic Facility I		n Making
			🚯 7% Increase in		
Pricing			1.5 % Increase		
Optimization					
Warehouse					
Management					
Lean	Pipe, Valve and Fitting	\$ 1.5 Billion	Warehouse Proces	ss Redesign / Imp	rovement
Distribution	General Line Industrial				
Global Business	Pipe, Valve and Fitting		Strategic Market I	Entry (CHINA <u>) - De</u>	cision Making
Feasibility	Metering Equipment	\$ 20 MM	Strategic Market I	Entry (MEXICO) - [	ecision Making





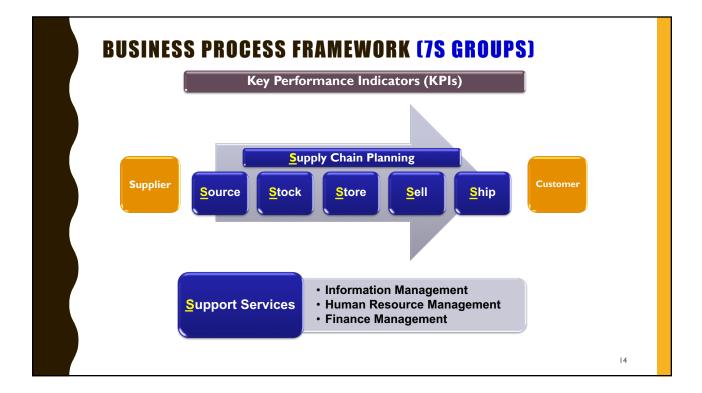


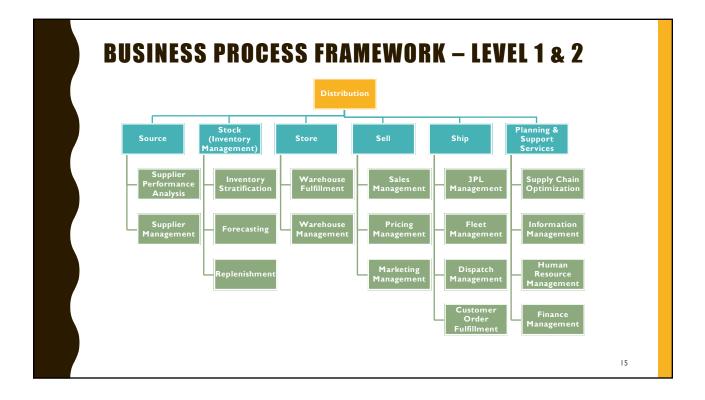


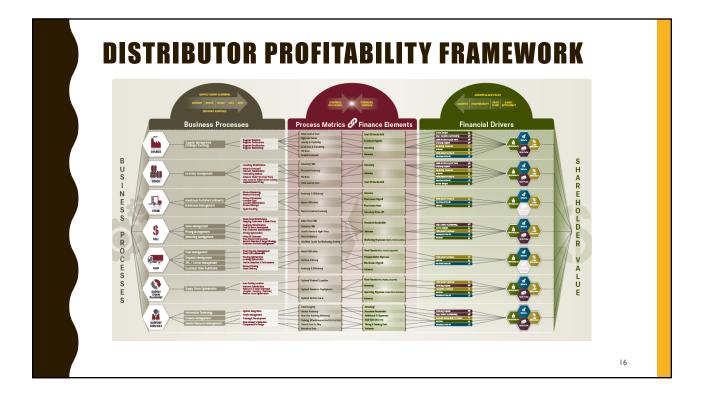




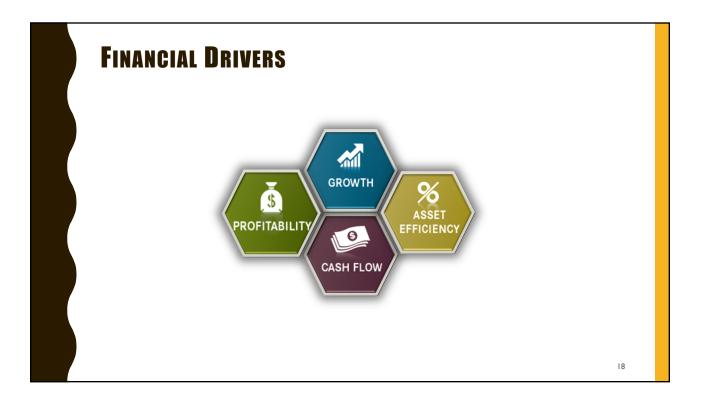


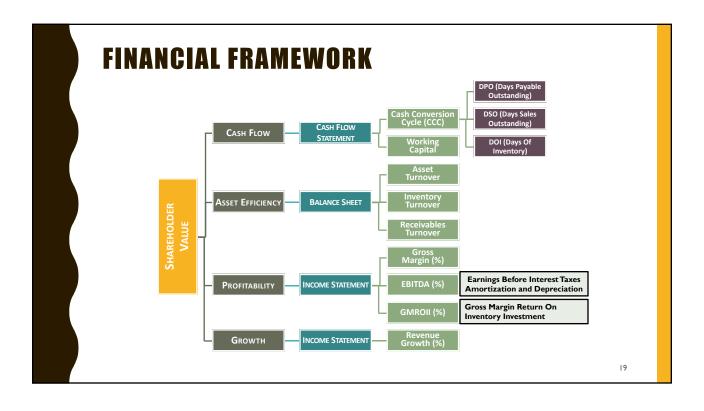




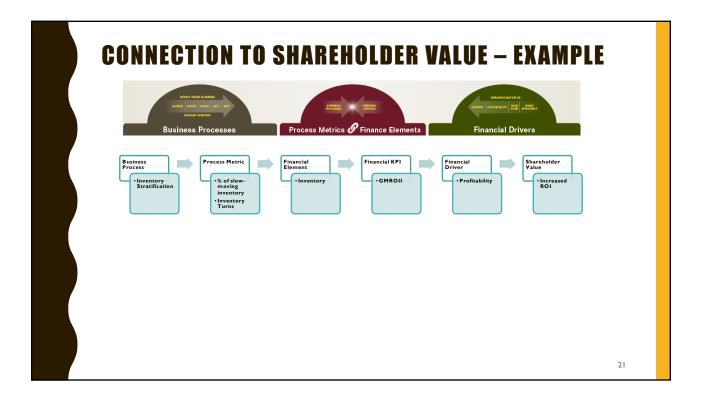


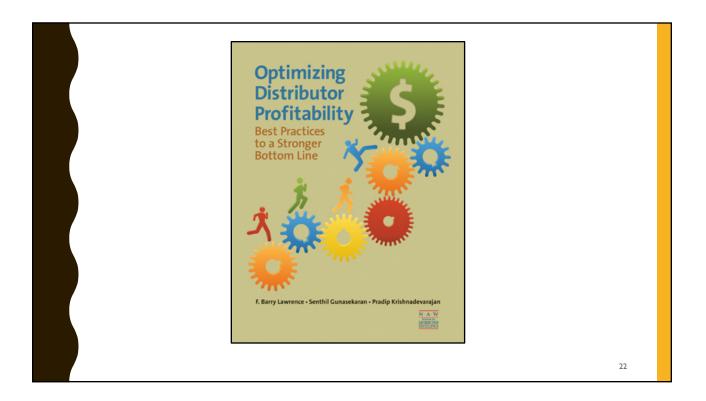


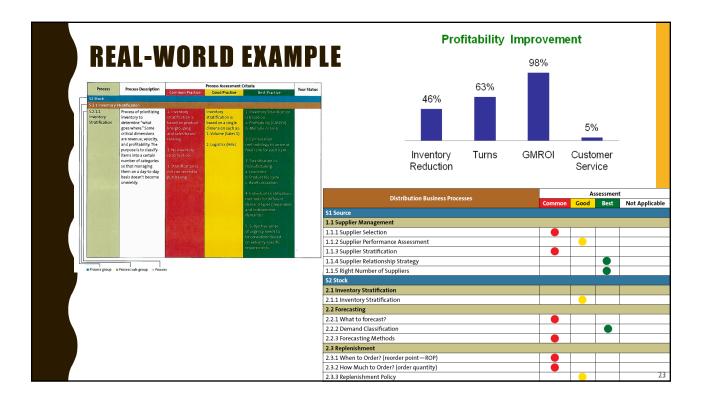




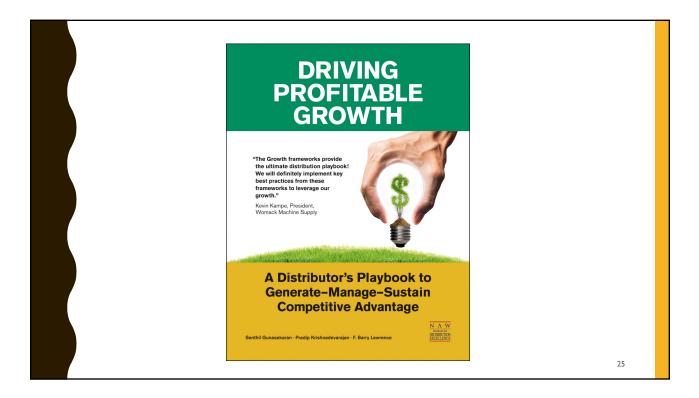


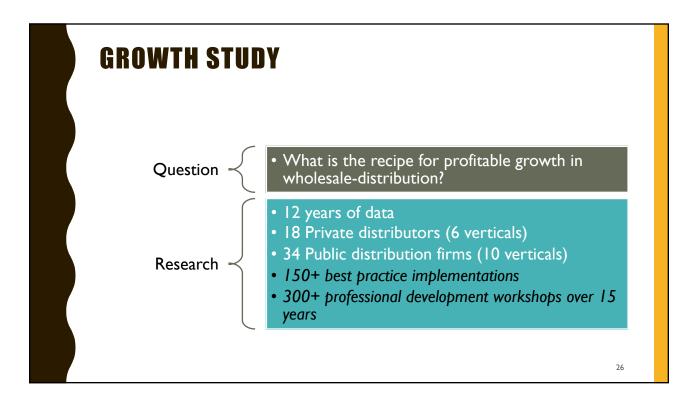


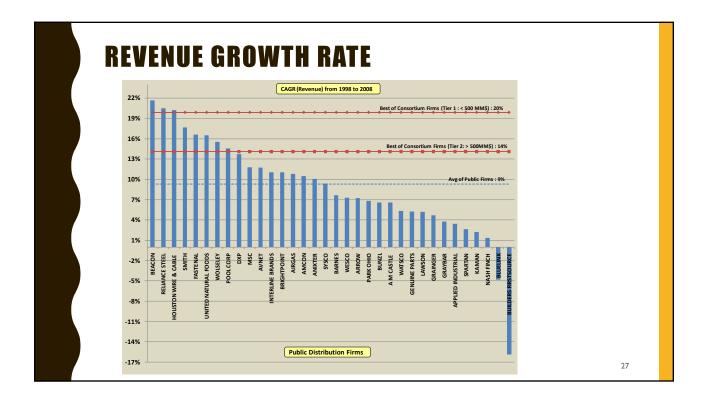


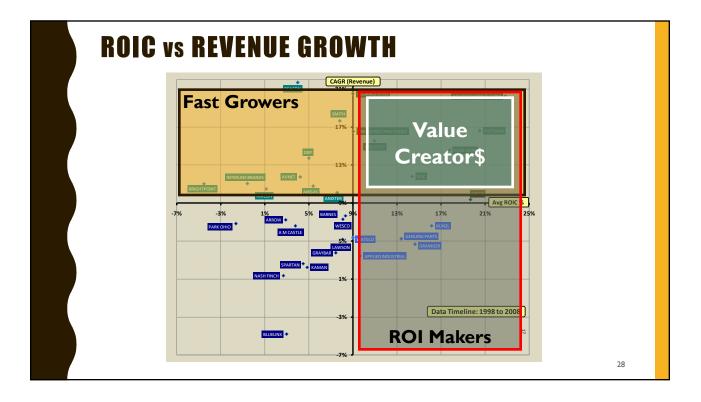


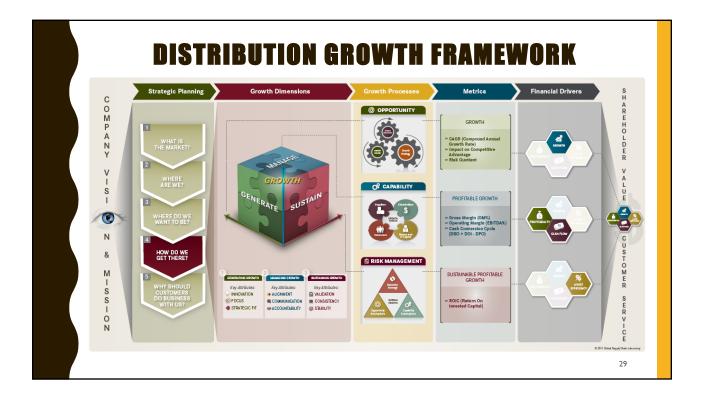














### **INCOME STATEMENT – TYPICAL DISTRIBUTOR**

Financial Statement - INCOME STATEMENT											
Income Statement				Fixed	Variable						
Net Sales	\$	18,265,879	100%								
Cost of Goods Sold	\$	13,662,877	74.8%	0%	100%						
Gross Margin	\$	4,603,002	25.2%								
Employee Compensation - Outside Sales	\$	1,116,045	6.1%	25%	75%						
Employee Compensation - Others	\$	1,156,230	6.3%	90%	10%						
Warehouse Expenses	\$	551,630	3.0%	50%	50%						
Delivery Expenses	\$	558,936	3.1%	20%	80%						
Other Operating Expenses (G&A)	\$	270,335	1.5%	25%	75%						
Total Operating Expenses	\$	3,653,176	20.0%								
Operating Margin	\$	949,826	5.2%								
Other Income	\$	-	0.0%								
Other Expenses	\$	-	0.0%								
EBITDA	\$	949,826	5.2%								

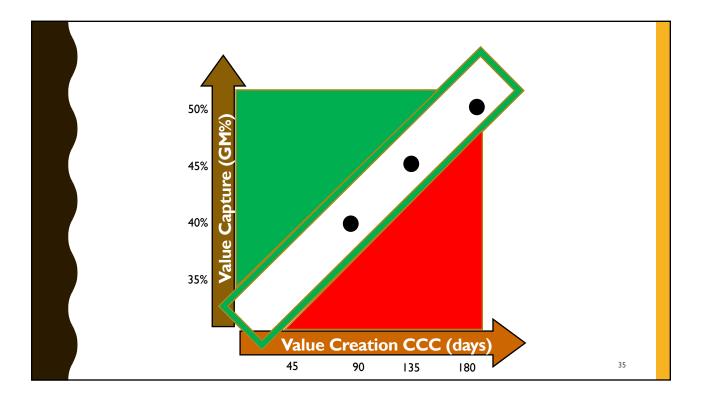
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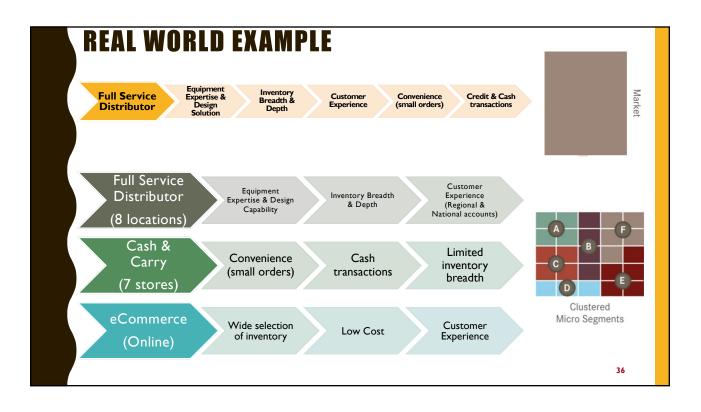
# **BALANCE SHEET – TYPICAL DISTRIBUTOR**

Financial S	tatement	- BALANC	E SHEET	
<u>Assets</u>			By Total Assets	
Inventory	\$	2,151,378	37.6%	
Accounts Receivables	\$	2,318,892	40.6%	
Cash & Marketable Securities	\$	245,267	4.3%	
Other Currrent Assets	\$	243,552	4.3%	
Total Current Assets	\$	4,959,090	86.7%	
Fixed & Non-current Assets	\$	758,099	13.3%	
Total Assets	\$	5,717,189	100.0%	
Liabilities & Net Worth			By Total Liabilities & I	Net Worth
Accounts Payables	\$	1,217,190	21.3%	
Notes Payable (Short-term Debt)	\$	175,518	3.1%	
Other Current Liabilities	\$	296,150	5.2%	
Total Current Liabilities	\$	1,688,858	29.5%	
Long-term Liabilities	\$	615,170	10.8%	
Net Worth Or Owner's Equity	\$	3,413,162	59.7%	
Total Liabilities & Net Worth	\$	5,717,189	100.0%	

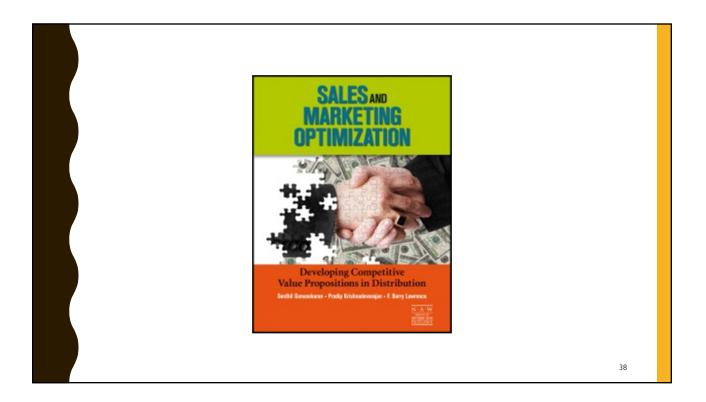
Financial KPIs	Formulae	Results
CASH FLOW		
Days Sales Outstanding (DSO)	Accounts Receivables / (Annual Revenue / 365)	
Days Payable Outstanding (DPO)	Accounts Payable / (Annual COGS / 365)	
Days Of Inventory (DOI)	Inventory / (Annual COGS / 365)	
Cash Coversion Cycle (Days)	DOI + DSO - DPO	
PROFITABILITY		
Gross Margin %	(Revenue - COGS) / Revenue	
Operating Margin (OR) Operating Profit \$	Revenue - COGS - Operating Cost	
Operating Margin %	(Revenue - COGS - Operating Cost) / Revenue	
GMROII %	Gross Margin / Inventory	
GROWTH		
Revenue Growth %	(Current Year Revenue - Previous Year Revenue) / Previous Year Revenue	
ASSET EFFICIENCY		
Inventory Turnover	COGS / Inventory	
Asset Turnover	Revenue / Total Assets	
Net Assets	Total Assets - Total Current Liabilities	
Return On Net Assets (RONA)	Operating Profit / Net Assets	

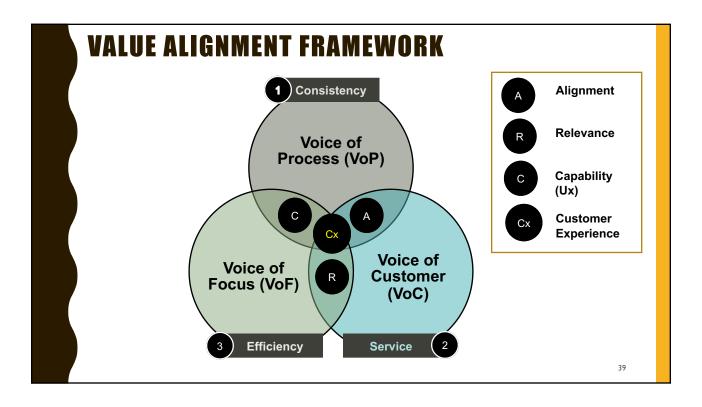
	Value Captur	e Value Creation	
Industrial Distributor	Gross Margin %	Cash Conversion Cycle (days) (DSO + DOI – DPO)	
	40%	90	
Industrial Supply Co.	45%	135	
Fastenal	50%	200	
Cash Conversion Cycle is for a company to convert CCC = Days of Inventory + Days S	investments in	to cash flows.	akes
CCC = Days of Inventory + Days S CCC = 90 days of supply + 45 days CCC = 105 days		Days Payable Outstanding	



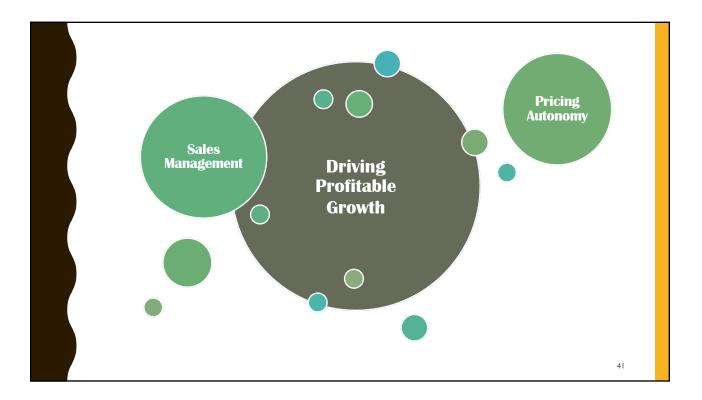




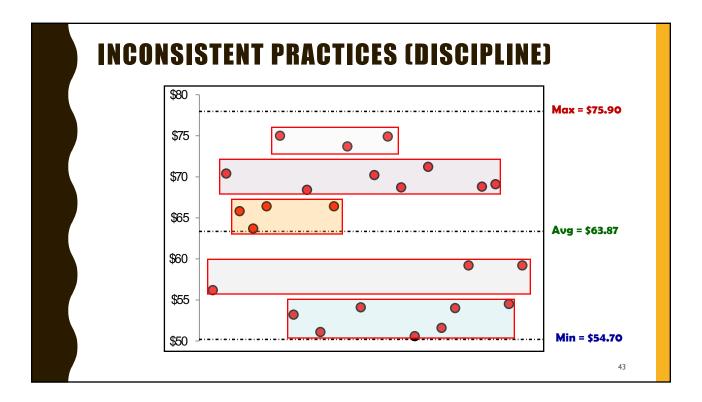


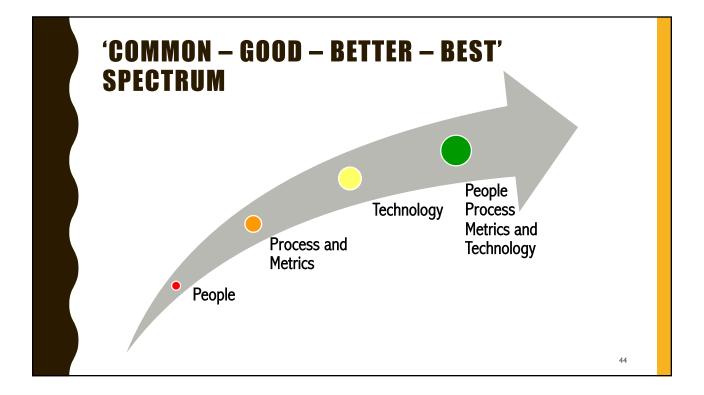




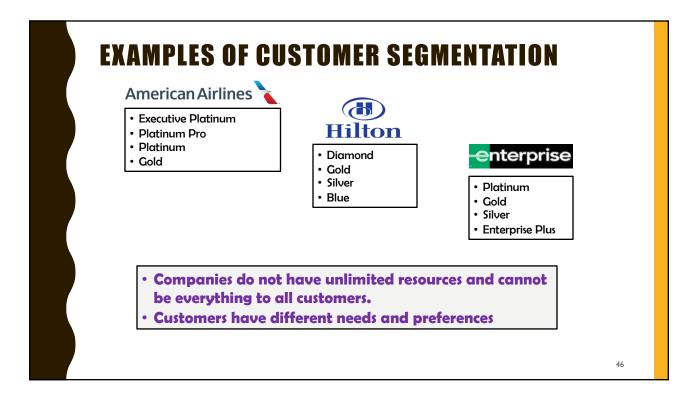








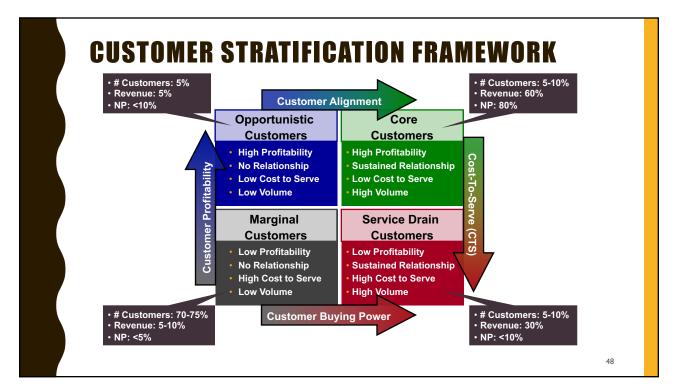


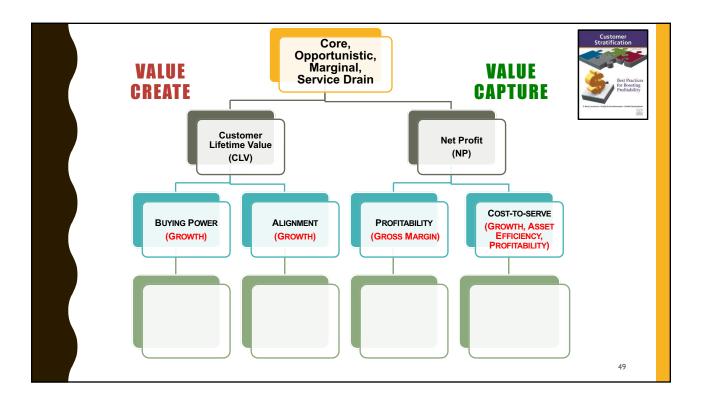


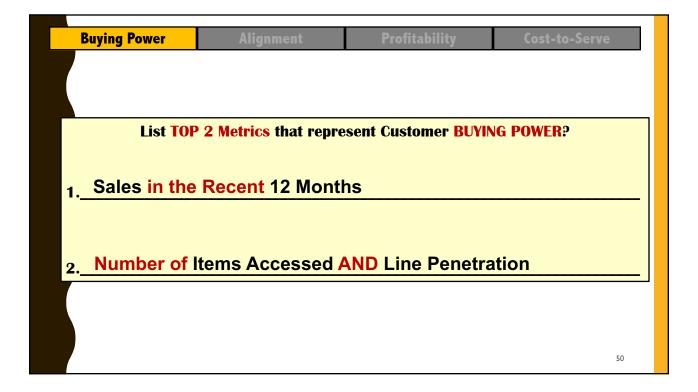
## **EXAMPLE – HOW TO SEGMENT CUSTOMERS?**

#### **Miles, Segments and Dollars Spent**

Executive Platinum oneworld Emerald	Platinum Pro oneworld Sapphire	Platinum oneworld Sapphire	Gold oneworld Ruby
100,000	75,000	50,000	25,000
120	90	60	30
\$12,000	\$9,000	\$6,000	\$3,000

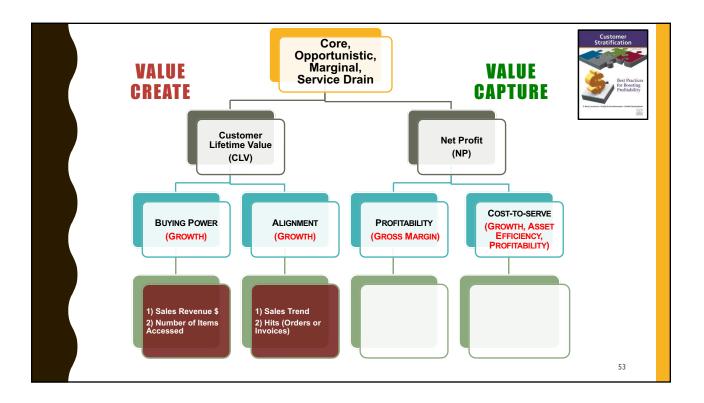


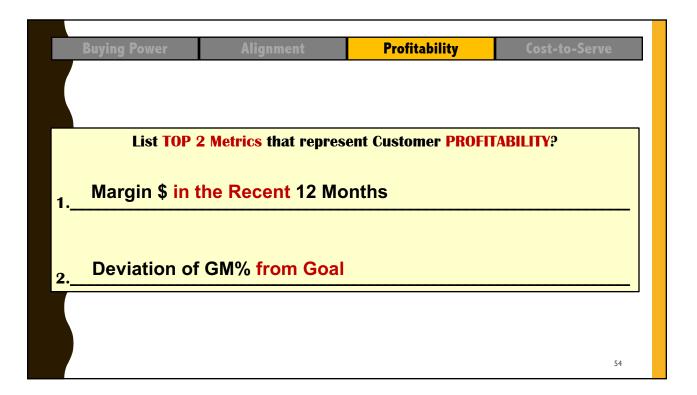


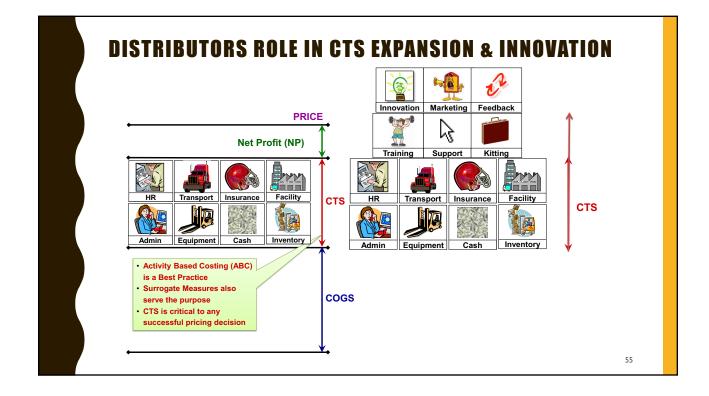


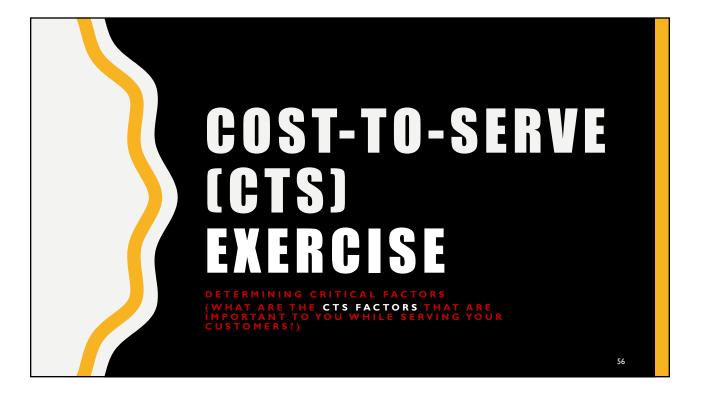
Buying Power	Alignment	Profitability	Cost-to-Serve
List TOP	<b>2 Metrics</b> that repre	esent Customer ALIG	NMENT?
Sales Trend (	Over Two Years		
2. Hits – <b># of O</b>	rders OR # of Inv	/oices	
			51

Buying Power Align				nment	P	rofitabi	Cost-to-Serve			
					Lev	el of Impo	rtance (100	%)		
					25%	25%	25%	25%		
Cu	stomer Lifetii	ne Value	(CLV) METR	ICS			SCORE			CLV
Sales \$ 2016	Sales \$ 2017	#Items	#Invoices	Sales Trend	Sales \$ 2017	#Items	#Invoices	Sales Trend	Final	Rank
\$ 191,751	\$ 598,121	132	28	212%	40	40	30	40	37.5	A
\$ 206,408	\$ 529,098	298	18	156%	40	40	20	40	35	A
\$ 11,282	\$ 27,738	3	2	146%	30	10	10	40	22.5	C
\$ 562	\$ 26,588	12	2	4631%	30	10	10	40	22.5	С
				SCORE		R	ULES			
				40	>\$36K	>75	>36	> 50%		
				30	\$24K - \$36K	50-75	36	25%-50%		
				20	\$12K - \$24K	25-50	24	0-25%		
				10	\$12K	25	12	<0%		52





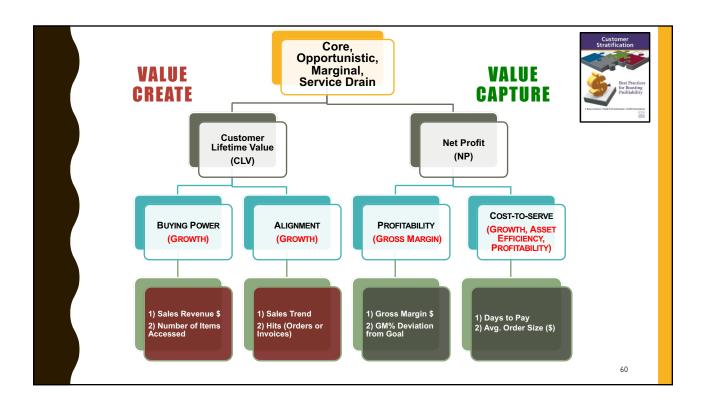


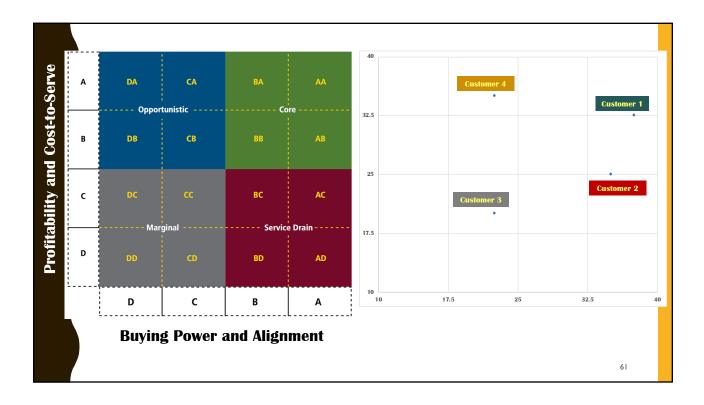


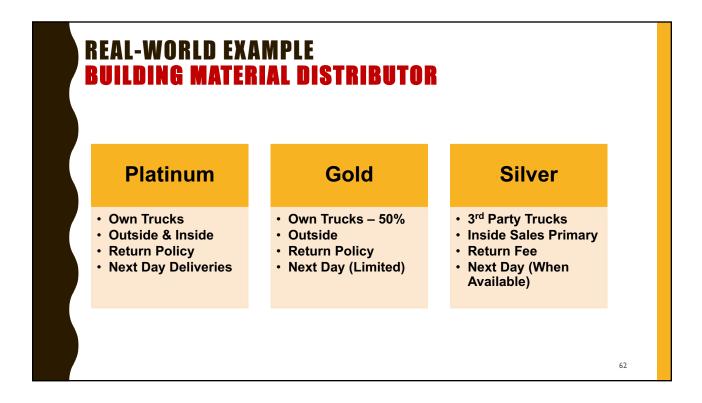
Buying Power	Alignment	Profitability	Cost-to-Serve
List TOP 2 Met	rics in Each Category th	at represent Custom	er COST-TO-SERVE?
1. SALES			
2. OPERATIONS	Avg. Order or Invo	oice Size (\$)	
-			
3. FINANCE	Days to Pay		
			57

No	Category	Factor	Unit of Measure	Available	Quantifiable	Reliable	Common Factor
1		Average days to pay	Days	Ø	Ø	Ø	Ø
2	Finance	Accounts receivables	Dollars	<b>I</b>	<b>I</b>	0	
3	Finance	Freight/transporation costs by customer	Dollars	Ø	0		
4		Customer specific inventory requirement	Dollars	<b>I</b>	<b>I</b>	0	
5		Average order size	Dollars	<b>I</b>	<b>I</b>	<b>S</b>	3
6		Average line size	Dollars	<b>I</b>	<b>I</b>	3	
7		Average number of line items	Number	<b>I</b>	<b>I</b>	3	$\bigcirc$
8		C & D items accessed	Percentage	<b>I</b>	<b>I</b>	3	$\bigcirc$
9		Sales \$ from C & D items	Percentage	<b>I</b>	<b>I</b>	3	
10		Returns (RMA - Return Material Authorization)	Number	<b>I</b>	<b>I</b>	<b>I</b>	$\bigcirc$
11	Operations	Returns to sales ratio	Percentage	<b>I</b>	<b>I</b>	0	
12	Operations	Quote conversion ratio	Percentage	<b>I</b>	0		
13		Same day deliveries required	Percentage	<b>I</b>	<b>I</b>	<b>I</b>	$\bigcirc$
14		Online or self serve orders	Percentage	<b>I</b>	<b>I</b>	0	
15		Will call orders	Percentage	<b>I</b>	$\bigcirc$	<b>e</b>	
16		Special product packaging requirements	Percentage	<b>I</b>	$\bigcirc$	0	
17		Order cancellations	Number	<b>I</b>	$\bigcirc$	0	
18		Errors on orders	Number	<b>I</b>	<b>I</b>	0	
19		Number of sales calls	Number	0			
20	Sales	Time spent with customer	Minutes/Hours	0			
21		Sales expenses by customer	Dollars	0			

erve	t <mark>-to-S</mark> e	Cost	Profitability Co				Buying Power Alignment				
		Level of Importance (100%)   25% 25% 25%									
NP			SCORE				ETRICS	ofit (CLV) MI	Net Pro		
Rank	Final	Days to Pay	Avg\$ / Invoice	Dev From Goal	GM \$ 2017	Days to Pay	Avg\$ / Invoice	Dev From Goal	GM \$ 2017	GM % 2017	
В	32.5	40	40	10	40	29	\$ 21,361	-1066	\$43,892	7.3%	
С	25	10	40	10	40	72	\$ 29,394	-770	\$54,516	10.3%	
С	20	20	40	10	10	53	\$ 13,869	-1385	\$ 1,150	4.1%	
A	35	30	40	40	30	30	\$ 13,294	763	\$ 6,815	25.6%	
			JLES	R		SCORE					
		30	>\$1.5K	>200	>\$9K	40					
		30-45	\$1K-\$1.5	100-200	\$6K-\$9K	30	Γ				
		45-60	\$750-\$1K	0-100	\$3K-\$6K	20					
59		>60	\$750	<0	\$3K	10	Γ				









## **HOW OTHER DISTRIBUTORS PERFORMED?**

**Customer Stratification Implementation** 

Industrial	\$ 750 MM	2.9% (Projected)	0						
HVAC	\$ 500 MM	6.8%	0						
Electronics	\$ 400 MM	1.2%	0						
Fluid Power Products	\$ 190 MM	3.1%	0						
Electrical	\$ 175 MM	2.7% (Projected)	0						
Outdoor Power Equipment	\$ 75 MM	1.5%	0						
Container	\$ 65 MM	3.4%	0						
Metals and Building Materials	\$ 50 MM	Implementation in progress and pilot location results range from 2 - 4%							
Building Materials	\$ 80 MM	gross margin improvement.							
Hardware	\$ 75 MM								
Paper	\$ 100 MM								
HVAC	\$ 80 MM								
Building Materials	\$ 1 Billion								
Industrial Automation	\$ 145 MM								
Building Materials	\$ 120 MM								
Building Materials	\$ 150 MM								
Propane Equipment	\$ 40 MM								
	\$ 100 MM								

CUSTOMER STRATIFICATION DASHBOARD STRATEGY Account PENETRATION. Perform Gap CHICAGO Market>> Analysis. Will additional services < Expand > convert them to service drain? **BOND FABRICATING & METAL PRODUCTION** Customer >> < Collapse > CUSTOMER ATTRIBUTES DATA for 2 Transportation Segment 40,843 23.2% **Sales Person ID SID 007** 176,181 \$ \$ Sales S **GM**\$ GM% CONTROL LEVERS « Customer Quadrants » Weight **Buying Power** Values **Buying Power Rank** Net Profit (NP) 50% 60% Sales Revenue \$ 316,483 \$ **VALUE GREATE** 40% # of Unique SKUs Accessed 55 A Customer Lifetime Value (CLV) Weight Loyalty Loyalty Rank Values 30% Revenue Trend 79.6% 50% MARGIN WATERFALL 40% Hits ( # of Invoices) 66 A 30% # of Months with Orders 12 100% CORE **Profitability Rank** Weight Profitability Values 61,343 40% Gross Margin \$ 50% CAPTUI 30% 19.4% С Gross Margin % 30% Trend of Gross Margin % -16.4% 19.4% 18.0% 17.6% 17.2% 16.7% Weight 50% **CTS Rank** Cost-to-Serve (CTS) Values 50% Average Invoice Size \$ 4,795 В В SALES GM SCost Order Pick Freight 19 50% В Days to Pay

