

# OPTIMIZING DISTRIBUTOR PROFITABILITY

## RESEARCH CONSORTIUM FINDINGS

ASSESS. UNDERSTAND. OPTIMIZE.



**SUPPLY CHAIN**  
**SYSTEMS LABORATORY**  
Texas A&M University



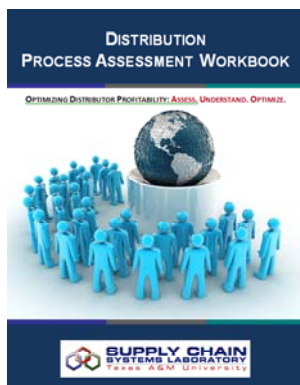
## MOTIVATION

Over the years, individual firms and professional researchers have compiled many “Best Practices” for distributors. These practices have been time tested and the best approach is now known for almost every imaginable distributor activity. Meanwhile, the pressure to perfect distribution operations has never been higher with customers continually demanding higher performance at lower cost. While each best practice has been analyzed in isolation and projections on its impact on the profit & loss (P&L) statement and balance sheet have been made, no one has successfully considered the impact of implementing improved practices (across various distributor functions) on the firm’s return on investment (ROI) and net profit. The objective of this consortium is to determine exactly how profitable a distributor could become by implementing best practices across all functional areas. The analysis will facilitate distributors and manufacturers optimize their operations potential and help financial firms assess the potential profitability of mergers and acquisitions. To address this need, a research consortium (Optimizing Distributor Profitability) was conducted in Fall 2007 by the Supply Chain Systems Laboratory at Texas A&M University. The consortium was sponsored by 11 distributors from 6 different channels. The following **5-step framework** was developed as a guideline for the distribution community to analyze profitability.



## 1. BUSINESS PROCESS ASSESSMENT

As a first step, the research team at Texas A&M developed frameworks for both business processes and financials related to distribution functions. The business process framework is structured as a collection of “7S” process groups – Source, Stock, Store, Sell, Ship, Supply Chain Planning, and Support Services. The financial framework is defined based on four financial drivers – Asset Efficiency, Cash Flow, Profitability, and Revenue Growth.



Each of the “7S” process groups was further expanded to two more levels of sub-processes. For example, Inventory Stratification is a specific business process under the “Stock” process group, i.e., Stock → Inventory Management → Inventory Stratification. This resulted in 42 business processes critical to any distributor function. A similar approach was established for the financial framework as well. This resulted in 10 financial metrics (GMROII, EBITDA, Turns, DSO, etc.) under 4 financial drivers. The workbook (shown above) was developed to assess the 42 distributor business processes and serve as a guidance to identify process gaps.

## 2. GAP IDENTIFICATION (BUSINESS PROCESS & PROFITABILITY)

Common, good, and best practices were defined for each of the identified business processes. These benchmarks served as an assessment platform for consortium members to evaluate their business process performance. Consortium members were also presented with cross-channel benchmarking numbers for 10 financial metrics. This due-diligence highlights the performance gaps – both in terms of process and profitability. This deliverable, “Distribution Process Gap Report”, enables distributors to assess their branches and potential acquisition targets.



DISTRIBUTION BUSINESS PROCESSES		ASSESSMENT		
		COMMON	GOOD	BEST
<b>S1 - SOURCE</b>				
<b>1.1. SUPPLIER MANAGEMENT</b>				
1.1.1	Supplier Selection		●	
1.1.1	Supplier Performance Assessment	●		
1.1.3	Supplier Stratification		●	
1.1.4	Supplier Relationship Strategy		●	
1.1.5	Right Number of Suppliers	●		
<b>S2 - STOCK</b>				
<b>2.1. INVENTORY STRATIFICATION</b>				
2.1.1	Inventory Stratification	●		
<b>2.2. FORECASTING</b>				
2.2.1	What to Forecast?			●
2.2.2	Demand Classification	●		
2.2.3	Forecasting Methods		●	

## 3. SHAREHOLDER VALUE MAP

Having identified the business process gaps, distributors need to understand the importance of those gaps by linking the corresponding business processes to shareholder value.

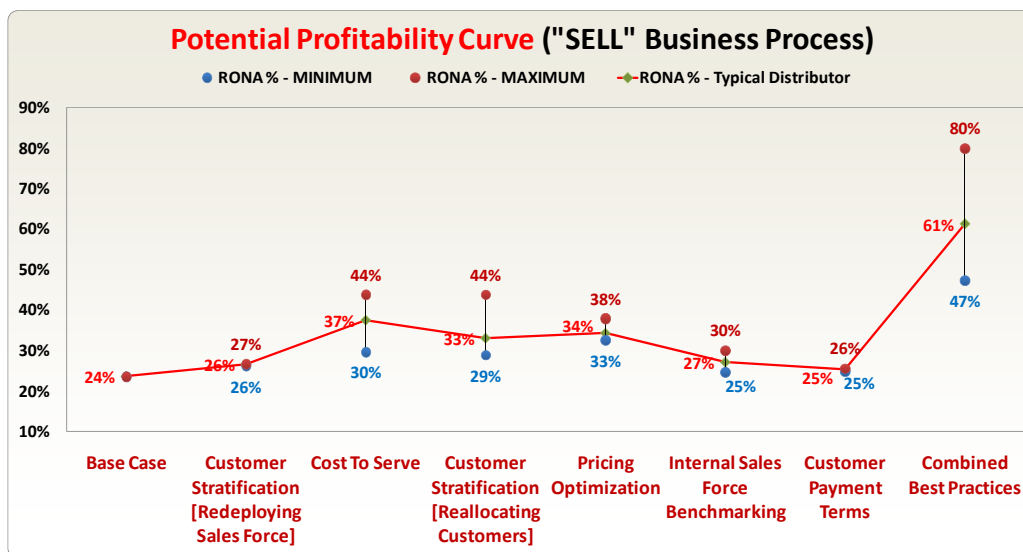
Each business process is linked to shareholder value using the following concept: Business Process → Process Metric → Financial Element → Financial Metric → Financial Driver → Shareholder Value. The ‘Supply Chain Profitability Framework’ was developed depicting each of the 42 business processes and their connection to shareholder value. This framework helps to understand the impact of various distribution functions on shareholder value and the interaction between the major process groups.

For instance, Supplier Stratification process can be connected to shareholder value as follows: Supplier Stratification → Lead Time → Inventory → Cash-to-Cash Cycle Time → Cash Flow → Shareholder Value. This deliverable (shown below) acts as an effective educational tool and strategic business planning aid (*Please refer last page for a larger image*).



#### 4. PROFITABILITY ANALYZER

A spreadsheet-based analyzer, developed for the consortium, is used to determine the potential profitability. This facilitates the process of building business cases as well if one plans to implement best practices. The graphic below illustrates the potential profitability curve for the “SELL” business process.



This analyzer was built based on two financial statements (Income statement and Balance Sheet). For each of the best practices, the analyzer attempts to determine the change in EBITDA and Return On Net Assets (RONA). The potential improvement numbers help distributors understand their potential profitability and the importance of various best practices with respect to shareholder value. Hence prioritizing and implementing best practices is critical to success.

## 5. BEST PRACTICES ROADMAP

Finally, the best practices under all 7 process groups were documented, explaining the best practices methodology and implementation challenges. This consolidated knowledgebase on best practices and their impact on key financial metrics such as EBITDA and RONA will be critical in understanding and implementing best practices across the firm. The profitability toolkit, consisting of 7 books, has already enabled consortium members in implementing popular best practices such as Inventory and Customer Stratification.



### BENEFITS

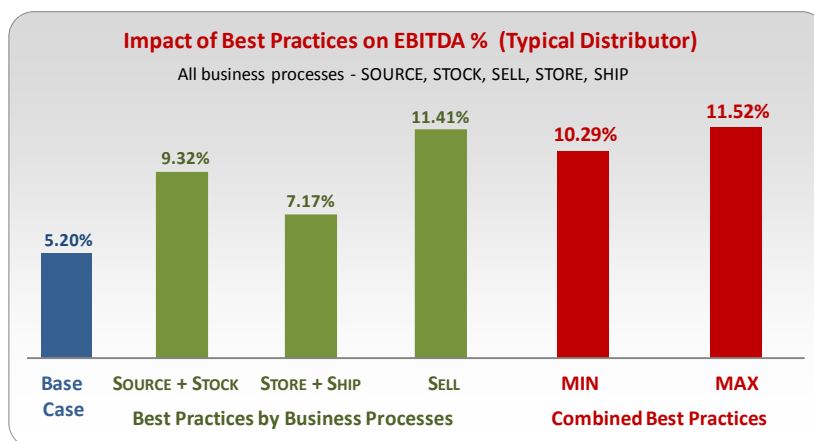
Consortium members primarily realized the following benefits:

- Profitability toolkit (1 Process Assessment Workbook, 6 Best Practices Booklets, Profitability Map)
- Educated workforce leading to better decision-making based on shareholder value.
- Process due-diligence capability to improve process performance.
- Improved EBITDA & ROI due to implementation of best practices.

### CONCLUSION

The consortium results and deliverables will help the distribution community reason with the acquisition activity in the industry and understand potential distributor profitability. Some of the highlights are:

- Potential for improving profitability exists (typical distributors can double their EBITDA).
- Business process and financial performance can be measured to assess potential profitability.
- A one-to-one connection can always be established between business processes & shareholder value.
- Best practices are realistic and achievable. The profitability connection can be quantified.
- Education will enable distributors to realize potential profitability.

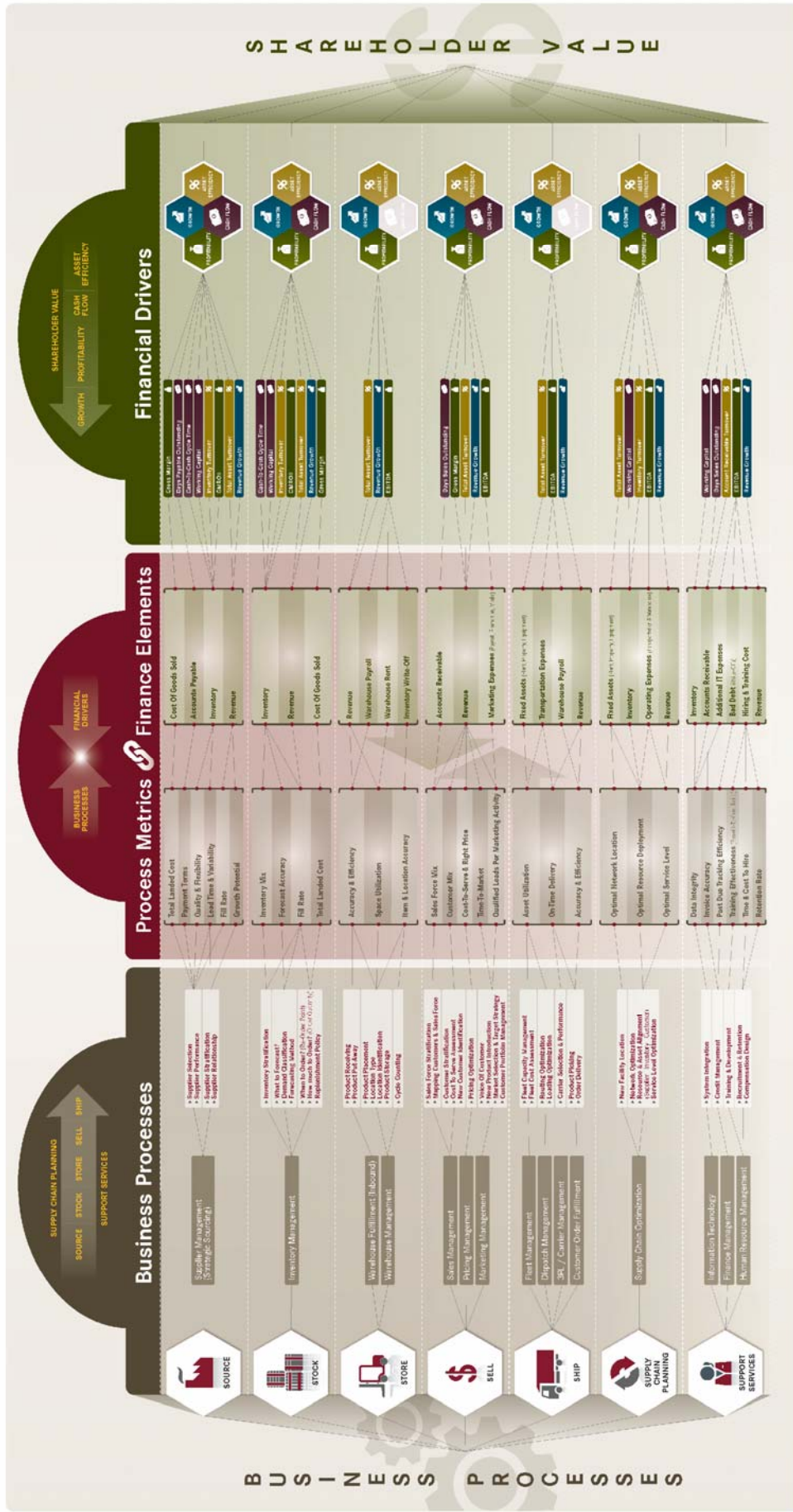


To learn more about research consortiums, please visit: <http://supplychain.tamu.edu/consortium>

To register for educational sessions, visit: <http://readcenter.tamu.edu/pages/OptDistProfitability.php>

# SUPPLY CHAIN PROFITABILITY FRAMEWORK

Linking Business Processes and Shareholder Value



<http://supply-chain.tamu.edu>  
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