GSCL
GLOBAL SUPPLY CHAIN LABORATORY

WHAT IS THE GSCL?

The Global Supply Chain Laboratory's (GSCL) role is to work with our industry partners, generating knowledge and conducting projects that codify new best practices and create competitive advantages. The professional researcher engineers at the GSCL create cutting-edge solutions for wholesale and industrial distribution channels, and provide answers to distribution and supply chain management challenges.

PROJECT AREAS

- Pricing Optimization
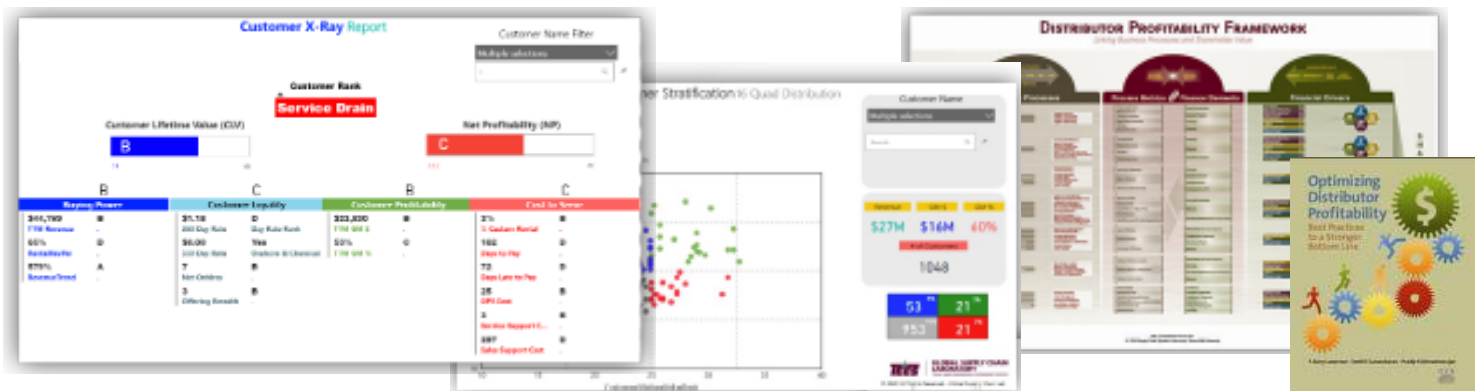- Customer Stratification
- Optimizing Distributor Profitability
- Network Optimization
- Supplier Stratification
- Inventory Stratification

in THOMAS & JOAN READ CENTER FOR DISTRIBUTION RESEARCH & EDUCATION

For More Information:
estherrsilva@tamu.edu
barry.lawrence@tamu.edu
srv238@.tamu.edu

A|M TEXAS A&M UNIVERSITY
https://readcenter.tamu.edu

WHY CHOOSE THE GSCL?

The **Global Supply Chain Lab** team at the Thomas & Joan Read Center has been conducting research projects for more than 20 years with industry partners. The Lab has created some of the most significant and broadly implemented distribution focused best practices such as Customer Stratification, Inventory Stratification, Pricing Optimization, and Network Optimization, along with many specialized, highly tailored projects.

Your Benefits

- Gain Competitive Advantage
- Improve Profitability
- Maximize Asset Efficiency
- Develop New Capabilities

Our Capabilities

- Applied Research and Proven Methods
- Actionable Results
- Industry-focused Education
- Better Value for Investment

Projects include business process optimization and profitability analysis and other customized applications. The research team applies and documents best practices specific to the firm.

As the project matures, the team also designs an educational program that explains and trains company specialists on findings and new processes in a business workshop that facilitates change management and teaches teams how to leverage the new practices.

PROJECTS AND OUTCOMES

Project Area	Client - Line of Trade	Client Revenue	Project Outcome		
			Inventory Reduction/ Re-deployment	Service Level Improvement	Gross Margin Improvement
Optimizing Distributor Profitability	Wireless	$ 1.2 Billion	Strategic Business Assessment identified TOP 3 initiatives (similar to following projects) for optimal profitability.		
	Building Materials	$ 1 Billion			
	Paper and Chemical	$ 350 MM			
Inventory Stratification	Oil and Gas Equipment	$ 1 Billion	20% ⊕	6% ⬆	
	Paper	$ 220 MM	10% ⊕	3% ⬆	
	Building Materials	$ 1.2 Billion	24% ⬇		
	Building Materials	$ 120 MM	20% ⬇		
	Metals Distributor	$ 450 MM	30% ⬇	8% ⬆	
Customer Stratification AND/OR Pricing Optimization	Outdoor Power Equipment	$ 75 MM			1.5% ⬆
	Paper	$ 100 MM	Implementation in progress and pilot location results range from 2 - 4% gross margin improvement.		
	HVAC	$ 80 MM			
	Building Materials	$ 1 Billion			
	Industrial Automation	$ 145 MM			
	Building Materials	$ 120 MM			
	Propane Equipment	$ 40 MM			
	Gases and Welding	$ 100 MM			
	Plastics and Resins	$ 500 MM			
	Packaging and Containers	$ 200 MM			

BUSINESS ANALYTICS UNIT

The **Business Analytics Unit** at the GSCL is tasked with creating cutting-edge solutions for wholesale and industrial distribution channels using advanced data analytics techniques and machine learning.

ETL Based Analytics Engine
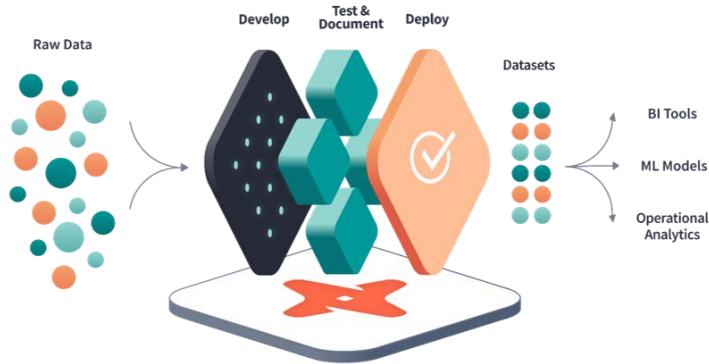
Goal

→ To develop an ETL based Analytics engine for our current offerings

Impact

→ Help create reusable analytical frameworks for business use cases
→ Reduced data cleaning and data pre-processing time

Customer Churn Predictions

Goal

→ To develop Customer Churn Predication model to retain the right customers
→ To gain insights about customer drift

Impact

→ Help achieve better customer engagement and communication
→ Cost Saving equivalent to customer life-time value of potentially churned customers

Product Recommendation Engine

Goal

→ To develop a recommendation engine for products based on Market Basket analysis

Impact

→ The companies doing product recommendation have reported almost 35% of their revenue coming from product recommendation.

RESEARCH CONSORTIA

"A collaborative research effort that brings multiple distribution and manufacturing firms and industry associations across diverse lines of trade together to solve an industry wide challenge."

	Year	Consortium Topics
	2000	Information Systems Consortium
	2005	Pricing Optimization
	2007	Optimizing Distributor Profitability
	2008	Texas/Mexico Trade Corridor
	2009	Sales and Marketing Optimization
	2011	Optimizing Growth and Market Share
	2011	Optimizing Customer Service
	2012	Optimization Channel Compensation
	2014	Optimizing Human Capital Development
	2015	Optimizing Value Add Services
	2015	Optimizing Data Analytics
	2018	Small Distributor Consortium
	2020	Digitizing the Sales Process

PUBLICATIONS FROM PAST CONSORTIA

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TEXAS A&M UNIVERSITY
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