

Example Readout; Contains  
Mock Data for Illustrative  
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# SCOR<sub>mark</sub>

## Prepared for Client

How well does your supply chain performance and practice stack up?

2019



[pwc.com](http://pwc.com) | [pwcbenchmarking.com](http://pwcbenchmarking.com)



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# OUTLINE

## APPROACH

- Overview of SCORmark Supply Chain Benchmarking Service
- Background, Objectives, and Scope
- Custom Comparison Population Characteristics

## EXECUTIVE SUMMARY OF RESULTS

## BENCHMARKING RESULTS

- Detailed Benchmark Results
  - Quantitative Performance
  - Complexity
  - Qualitative Practices
- Conclusion and Steps

## APPENDIX

- About PwC

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# APPROACH

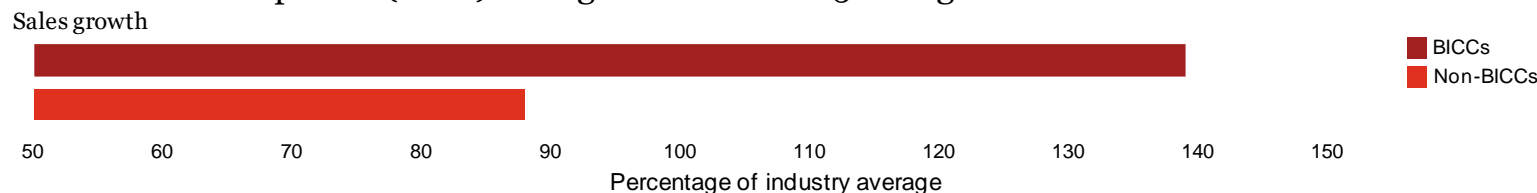
*Overview of SCOR<sub>mark</sub> Supply Chain  
Benchmarking Service*

# Why is SCM/Operational Excellence Important?

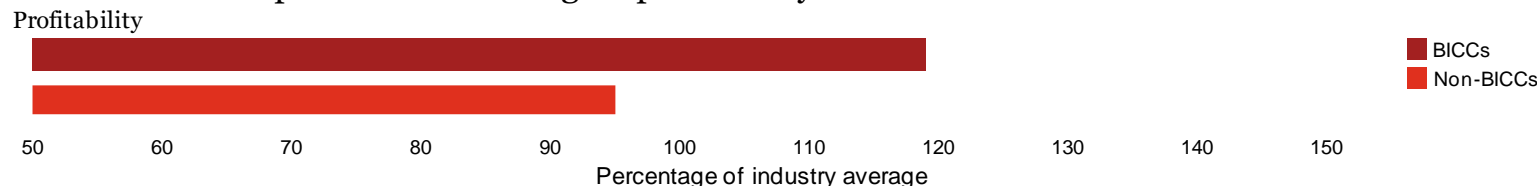
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Leaders succeed not only in supply chain measures, but they achieve superior top and bottom-line performance...

Best-in-class companies' (BICC) sales growth is almost 50% higher than non-BICC



Best-in-class companies have 20% higher profitability than non-BICC



Source: Strategic Supply Chain Management, 2<sup>nd</sup> Edition, McGraw-Hill

Yet there is significant untapped opportunity to achieve competitive advantage...

Surprisingly, **only 45%** of companies view the supply chain as a strategic asset

And **only 9%** say the supply chain is helping them outperform their peers

# Supply chain performance ties directly to top and bottom line financials; benchmarking can highlight improvement focus areas

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## Income Statement

Summary	
Sales Revenue	\$187,200,000
COGS Expense	\$121,680,000
Gross Margin	\$65,520,000
OpEx	\$36,900,000

**Customer Facing Performance**

- Delivery Performance
- Order Fulfillment Lead Time
- Production Flexibility

**Total Supply Chain Management Cost**

- Inventory Carrying
- Order Management
- Material Acquisition
- Supply Chain Finance and Planning
- Supply Chain IT

*To ensure consistency in the benchmarked values data is collected and benchmarks are calculated per the same definition as all other companies in the database; this ensures “apples to apples” comparison*

## Balance Sheet

Assets	
Cash	\$10,184,526
Accounts Receivable	\$18,000,000
Inventory	\$30,420,000
Prepaid Expenses	\$2,880,000
Property, Plant, Equipment	\$54,000,000
Accumulated Depreciation	(\$14,400,000)
<b>Total Assets</b>	<b>\$101,084,526</b>

Inventory Days of Supply

Net Asset Turns

**Cash-to-Cash Cycle Time**

Liabilities and Owner's Equity	
Accounts Payable: Inventory	\$9,360,000
Accounts Payable: OpEx	\$2,160,000

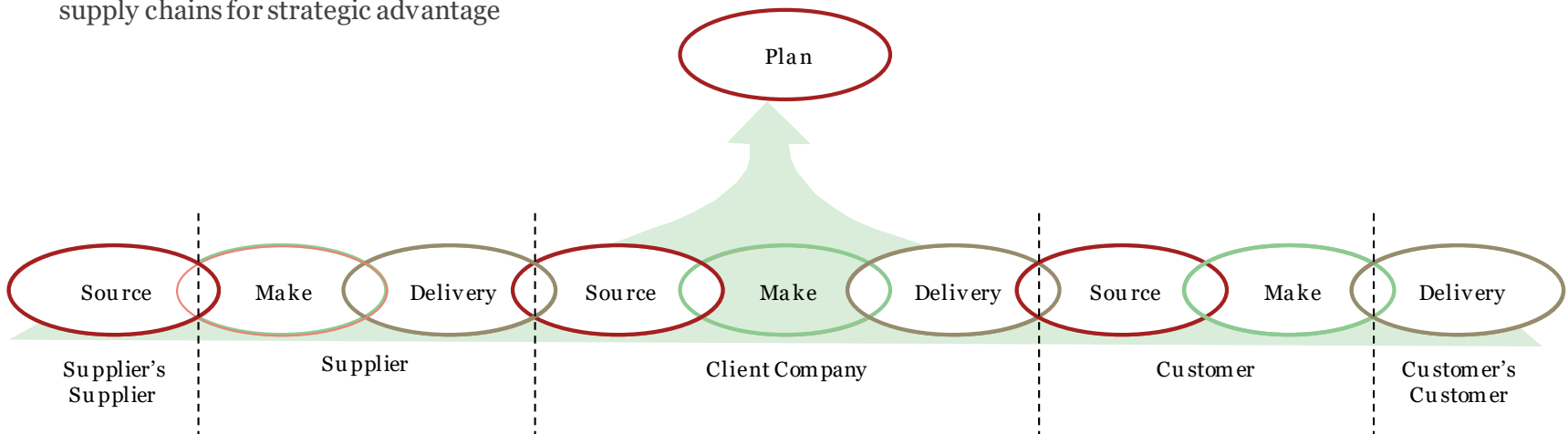
# The supply chain is structured around five distinct management processes—plan, source, make, deliver, and return

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Supply chains from one company overlap with those of their suppliers and customers

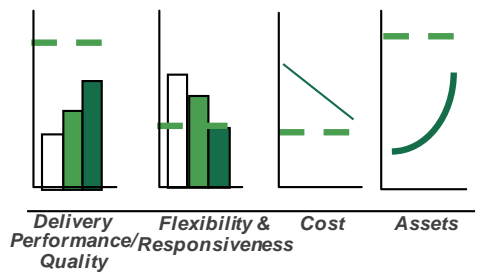
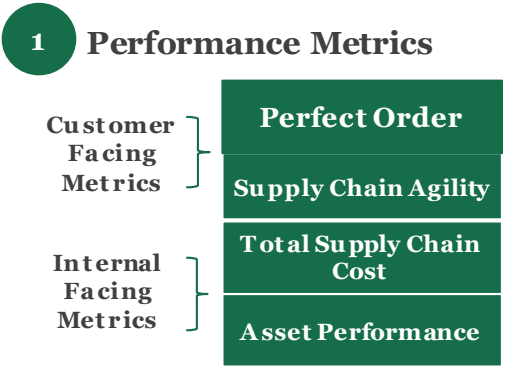
## Supply-Chain Operations Reference-model® (SCOR®)

- Founded on five distinct management processes: Plan, Source, Make, Deliver, and Return
- Co-developed by PwC (PRTM) in 1996 to establish a framework with a balanced set of metrics that provide insight into key areas of supply chain management processes
- Builds on the concepts of business process reengineering, benchmarking, and process measurement by integrating their techniques into a cross-functional framework that addresses management issues at the enterprise rather than at the functional level
- Recognized by the 1000+ member companies of the APICS as an effective "toolkit" for companies wanting to upgrade their supply chains for strategic advantage

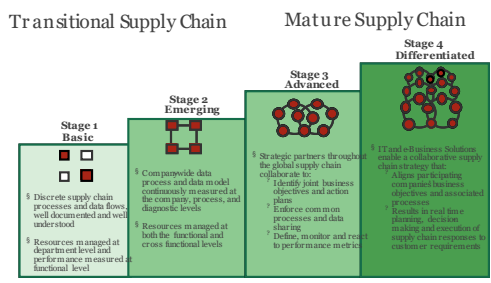
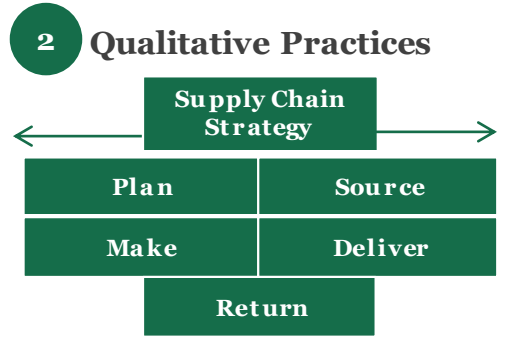


# These SCOR processes are then benchmarked against quantitative performance metrics, qualitative practices, and SC complexity

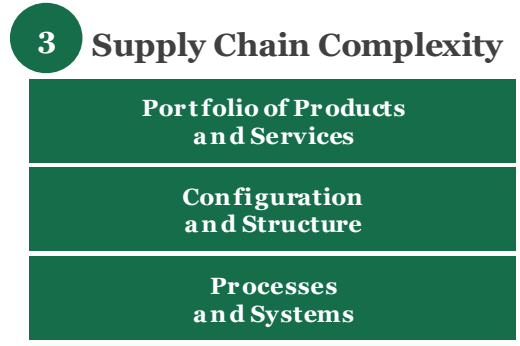
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Supply chain benchmarking links key financial outcomes with supply chain strategies



Stage of supply chain maturity correlates with performance, profitability, and sales growth



- Product Portfolio
- Supplier Base
- Customer Base & Channel Strategies
- Manufacturing
- Distribution and Transportation
- Management Processes and Systems

Quantifying and addressing complexity is a key enabler in Supply Chain transformation

Data is collected and reported at the supply chain level, not company-wide level



# Benchmarking is an important tool to drive SC performance excellence

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## Benchmarking IS:

- Process that requires data submission using standard metrics frameworks which provide accurate intra- and inter-company comparison
- Tool that compares company performance against best-in-class to identify improvement opportunities, areas of competitive advantage
  - **Qualitative:** Business Practices
  - **Quantitative:** Performance Metrics
- A way to measure the financial opportunity of achieving target performance levels

## Benchmarking is NOT:

- Scrutinizing fractions of percentage points in results – *it is focused on bigger picture results for directional purposes*
- Obtaining performance numbers without submitting company data – *full data is needed to get complete benchmark visibility*
- A competitive intelligence analysis – *it is comparing against best-in-class and best practices inside and outside of a peer group*
- A standalone activity – *it is a tool to develop strategy, set goals, and drive overall performance improvement efforts*

# Before getting a benchmark started it is important to understand some common pitfalls to avoid

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**Benchmarks too high level or represent different business types**

- Business leadership needs to buy into the comparability of benchmarks before recognizing the need for change
- Inappropriate benchmarks often raise more questions than they answer
- Projects are quickly derailed when stakeholders cannot agree on the initial value proposition

**Benchmarking not part of a well planned improvement process**

- Results should be immediately tied to specific project recommendations
- Projects should be structured into prioritized, time-phased improvement roadmap
- Specific objectives should be set for each initiative on the roadmap and tied back to the initial value proposition

**Targets set without reference to the broader business strategy**

- No business can be best-in-class on every metric
- Targets should be set individually for each business, recognizing tradeoffs between cost, working capital, and service levels
- Stakeholders should help set targets in each area – providing teams with ownership of the project outcome

**Benchmark performance not tied to processes and performance drivers**

- Performance metrics provided in a standalone fashion provide little actionable information
- Assessments should include a thorough review of current process capabilities and external factors driving performance (e.g., supply chain complexity)

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# APPROACH

*Background, Objectives, and Scope*

## Background:

Client is a member of APICS and engaged in SCORmark benchmarking for its xxx Business

## Objectives:

- Measure Supply Chain performances against similarly structured Supply Chains to identify improvement opportunities and areas of competitive Advantage
- Compare to other Supply Chains with a similar strategy
- Help identify target metrics to continuously measure and provide associated performance levels to drive operational improvement efforts
- Provide potential financial opportunities associated with achieving Superior levels of performance

## Products:

XXXX

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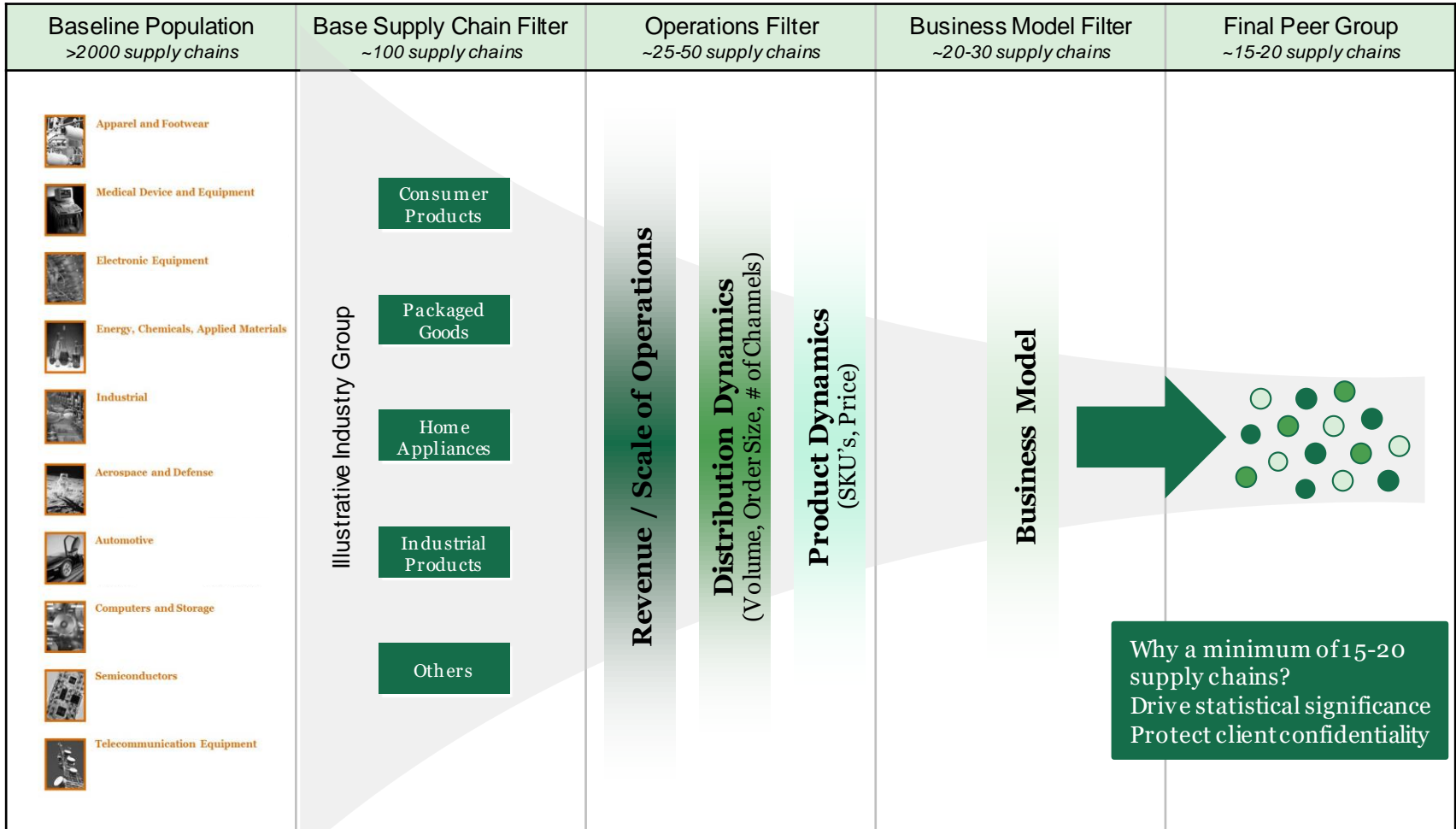
SCOR<sub>mark</sub>

# APPROACH

*Custom Comparison Population Characteristics*

# PwC's database of >2000 company supply chains enabled selection of comparison supply chains for this assessment

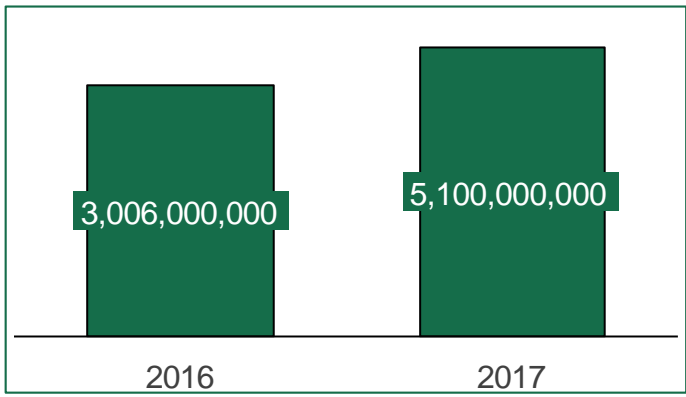
Example Readout; Contains Mock Data for Illustrative purposes only



# Client's peer group focused on supply chains of similar product types, revenue and manufacturing strategy

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## Client Product Revenue (\$)



## Products Manufactured By These Supply Chains

- *Products*

Characteristic	Population Average	Client
Product Revenue	\$4.0B USD	\$5.1B USD
Manufacturing Strategy CTO	~50% CTO	~60% CTO
Manufacturing Strategy MTS	~40% MTS	~30% MTS
Manufacturing Process	93% Discrete manufacturing	95% Discrete manufacturing

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# EXECUTIVE SUMMARY OF RESULTS



# Executive Summary of Client's benchmark results

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Attributes	Key Observations	Performance
Reliability	TBD	
Responsiveness	TBD	
Agility	TBD	
Cost		
Asset Management	TBD	
	TBD	

Executive Summary created specifically for your organization

**On-Track** 
**Potential Improvement** 
**Major Opportunity** 

# SCORmark Level 1 Scorecard

Example Readout; Contains Mock Data for Illustrative purposes only

Attribute	Metrics	Target Performance	Client	Parity (50%)	Advantage (70%)	Superior (90%)	Gap to Target
Reliability	Perfect Order Fulfillment	Parity	72.7	66.7	C 74.6	82.5	-
Responsiveness	Total Order Fulfillment Cycle Time, Stocked Products (Days)	Advantage	37.8	C 14.5	8.9	3.4	28.9
Agility	Supply Chain Flexibility (Days)	Superior	6.0	25.5	14.3	C 3.0	3.0
	Supply Chain Adaptability (%)		21.3	C 21.3	31.9	42.5	21.2
Cost	Total Supply Chain Management Cost (% of Product Revenue)	Advantage	3.1	4.8	3.6	C 2.3	-
Asset Mgmt. Efficiency	Inventory Days of Supply	Parity	22.3	53.8	36.9	C 20.0	-

C Client

## Observations

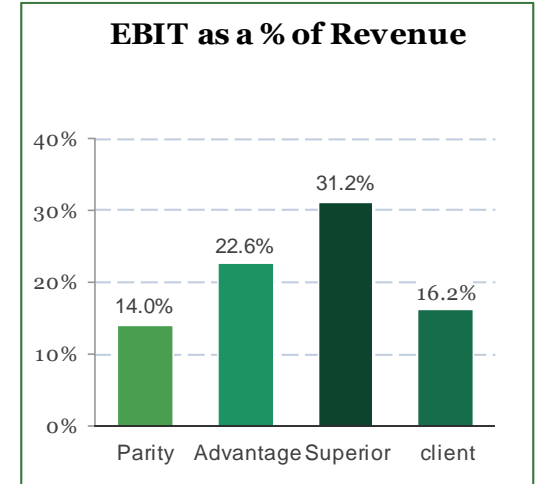
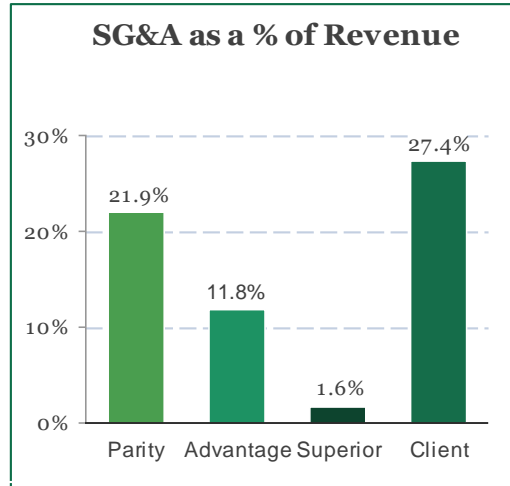
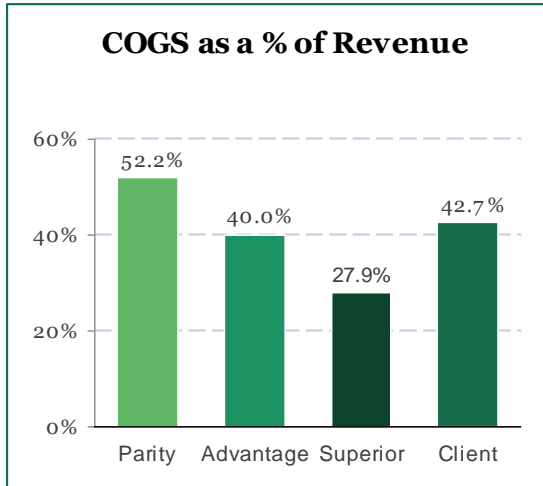
- TBD.

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# BENCHMARKING RESULTS

*Detailed Benchmark Results - Quantitative Performance*

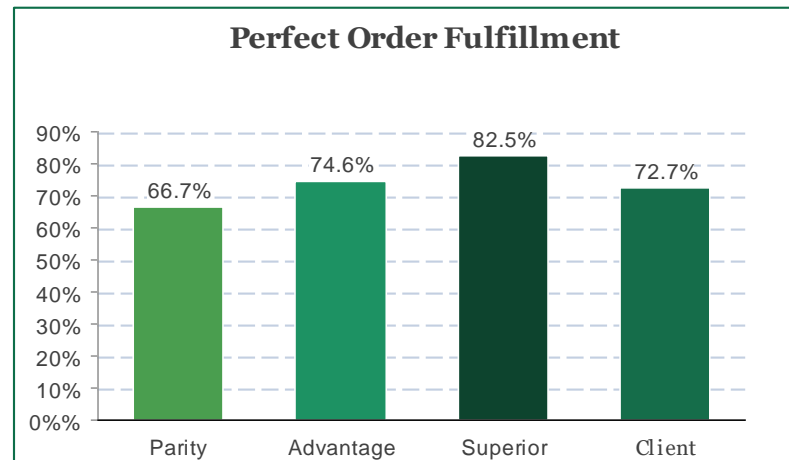
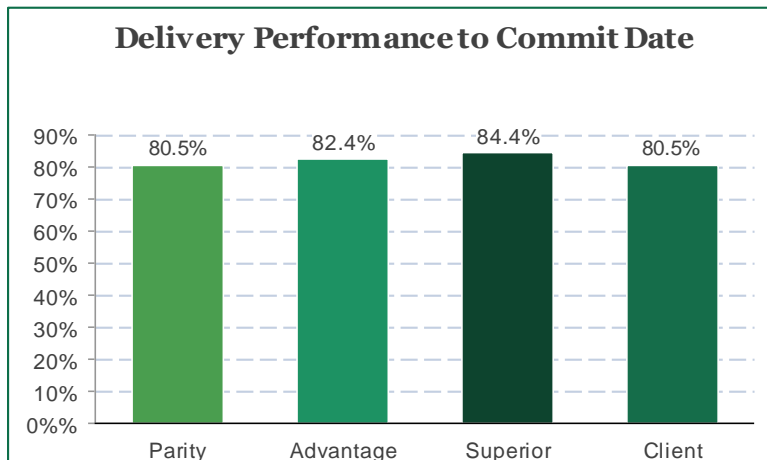


## Observations

- TBD.

# Delivery Performance

Example Readout; Contains Mock Data for Illustrative purposes only



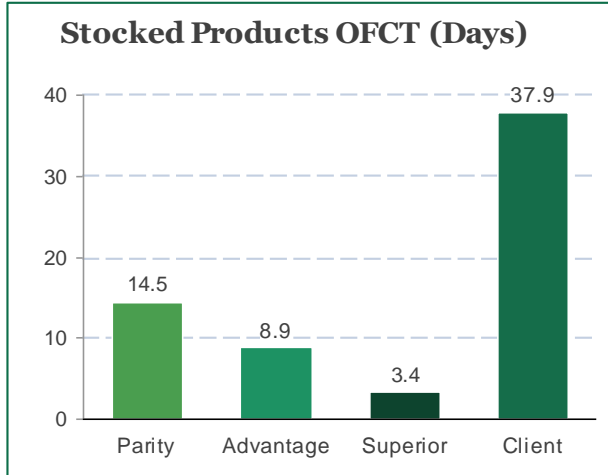
## Observations

- TBD.

# Order Fulfillment Cycle Time (OFCT), Days Stocked Products

Example Readout; Contains Mock Data for Illustrative purposes only

Attribute: Responsiveness  
CORmark



Cycle Time (Days)	Parity	Advantage	Superior	Client
Customer Signature/Authorization to Order Entry Complete	0.85	0.64	0.43	4.42
Order Entry Complete to Start Pick/Pack of Order	0.85	0.85	0.85	0.71
Start Pick/Pack of Order to Order Ready-to-Ship	1.36	1.11	0.85	0.00
Order Ready-to-Ship to Installation Complete	4.42	3.06	1.70	32.73

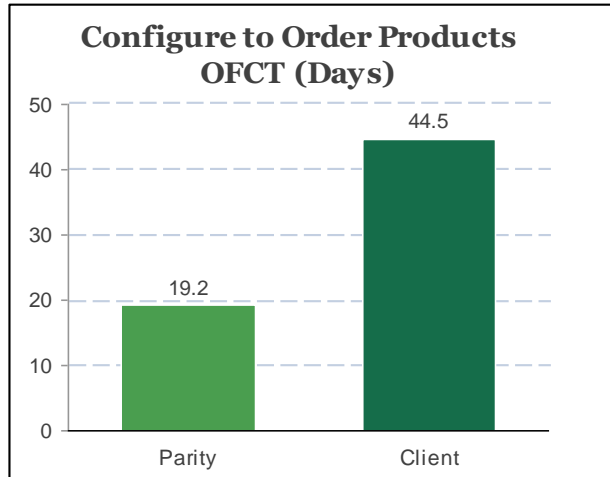
■ Worse than Parity   
 ■ Close to/Better than Parity   
 ■ Among Superior

## Observations

- TBD.

# Order Fulfillment Cycle Time (OFCT), Days Configure-to-Order Products

Example Readout; Contains Mock Data for Illustrative purposes only



Cycle Time (Days)	Parity	Client
Customer Signature/Authorization to Order Entry Complete	0.85	4.97
Order Entry Complete to Start Manufacture	1.28	0.71
Start Manufacture to Order Complete Manufacture	7.57	2.55
Order Complete Manufacture to Installation Complete	4.42	36.98

■ Worse than Parity   
 ■ Close to/Better than Parity   
 ■ Among Superior

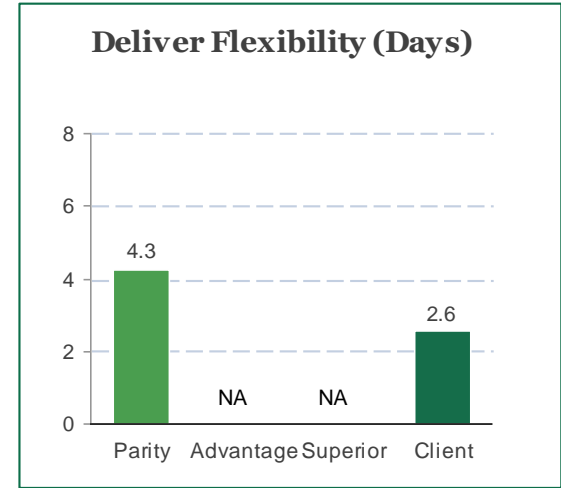
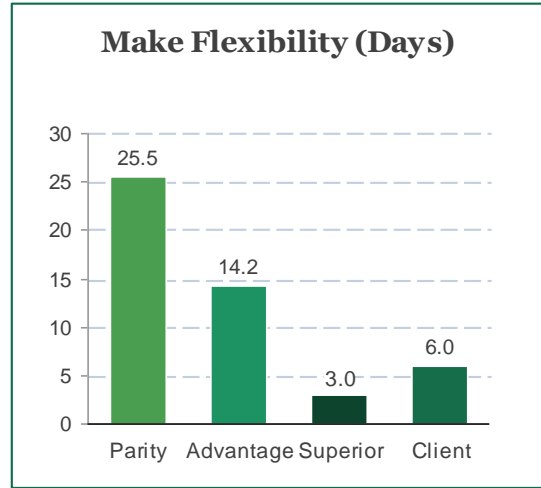
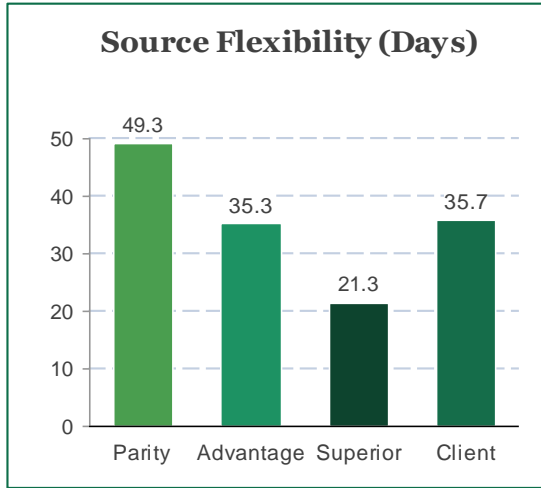
## Observations

- TBD.

# Supply Chain Flexibility

Example Readout; Contains Mock Data for Illustrative purposes only

**Flexibility:** number of days required to achieve an unplanned sustainable 20% increase



## Observations

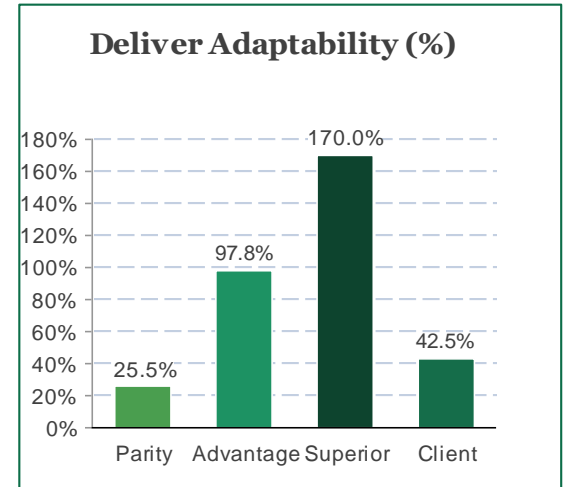
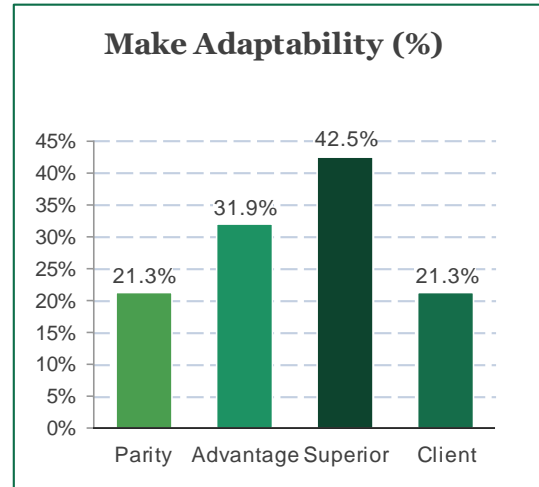
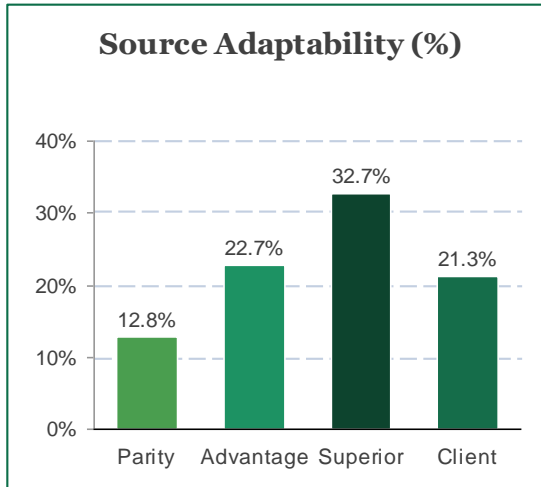
- TBD.



# Supply Chain Adaptability

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**Adaptability:** maximum sustainable percentage increase that can be achieved in 30 days



## Observations

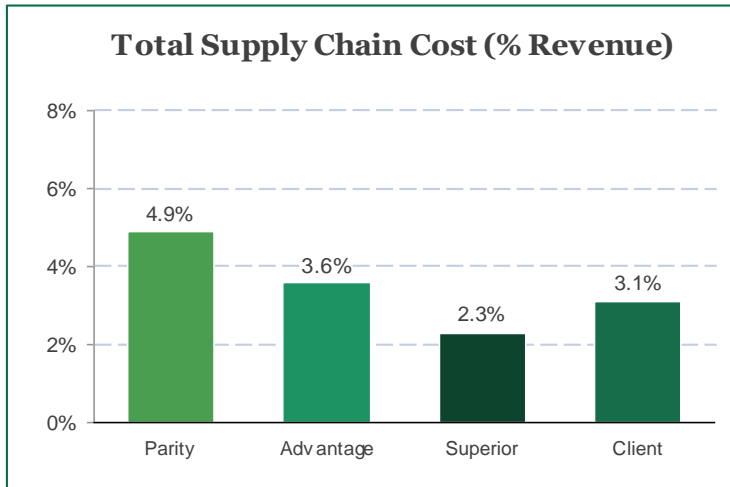
- TBD.

# Total Supply Chain Management Cost as % of Product Revenue

## Summary

Example Readout; Contains Mock Data for Illustrative purposes only

Attribute: Cost  
CORmark



Cost (% of Revenue)	Parity	Adv.	Superior	Client
Order Management Cost	2.37%	1.45%	0.54%	1.11%
Material Acquisition Cost	1.39%	0.99%	0.60%	1.34%
Inventory Carrying Cost	0.87%	0.73%	0.60%	0.44%
Supply-Chain-Related Finance & Planning Cost	0.19%	0.14%	0.11%	0.23%

■ Worse than Parity   
 ■ Close to/Better than Parity   
 ■ Among Superior

### Observations

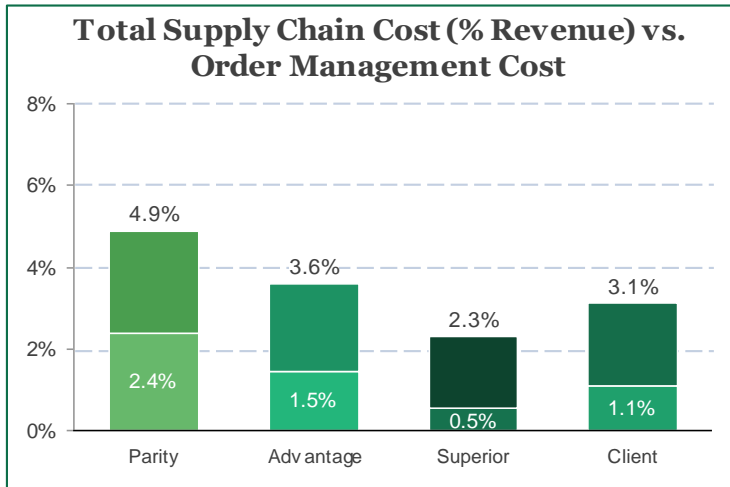
- TBD.

# Total Supply Chain Management Cost as % of Product Revenue

## Order Management Cost

Example Readout; Contains Mock Data for Illustrative purposes only

Attribute: Cost  
CORmark



Cost (% of Revenue)	Parity	Adv.	Superior	Client 2017
New Product Release, Phase In, and Maintenance	0.16%	0.10%	0.03%	0.48%
Order Fulfillment	0.16%	NA	NA	0.18%
Distribution	0.42%	0.22%	0.03%	0.20%
Transportation, Outbound Freight and Duties	0.93%	0.60%	0.27%	0.24%

■ Worse than Parity   
 ■ Close to/Better than Parity   
 ■ Among Superior

### Observations

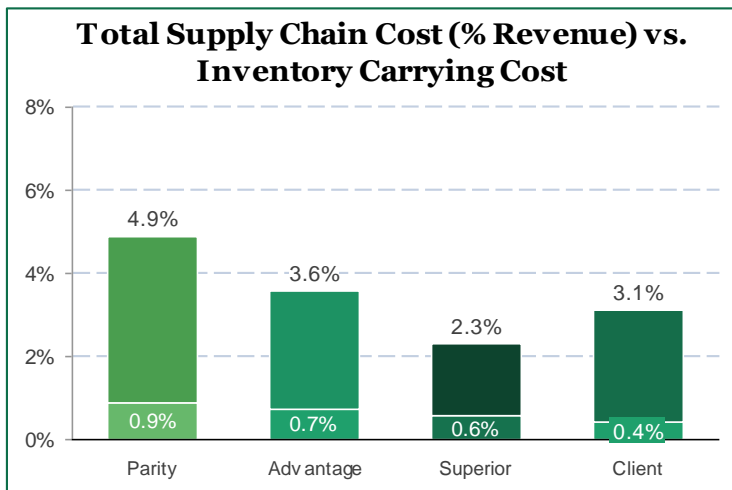
- TBD.

# Total Supply Chain Management Cost as % of Product Revenue

## Inventory Carrying Cost

Example Readout; Contains Mock Data for Illustrative purposes only

Attribute: Cost  
CORmark



Cost (% of Revenue)	Parity	Adv.	Superior	Client 2017
Opportunity Cost	0.71%	0.57%	0.43%	0.24%
Total Obsolescence for Raw Material, WIP and Finished Goods	0.33%	0.19%	0.03%	0.20%

■ Worse than Parity   
 ■ Close to/Better than Parity   
 ■ Among Superior

### Observations

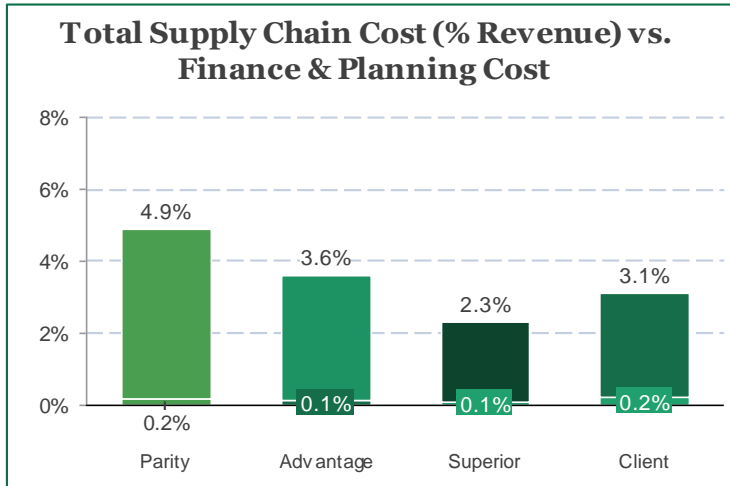
- TBD.

# Total Supply Chain Management Cost as % of Product Revenue

## Supply Chain-Related Finance and Planning Cost

Example Readout; Contains Mock Data for Illustrative purposes only

Attribute: Cost  
CORmark



Cycle Time (Days)	Parity	Advantage	Superior	Client
Supply-Chain Finance Cost	0.05%	0.03%	0.02%	0.17%
Dem and/Supply Planning Cost	0.14%	0.09%	0.06%	0.06%

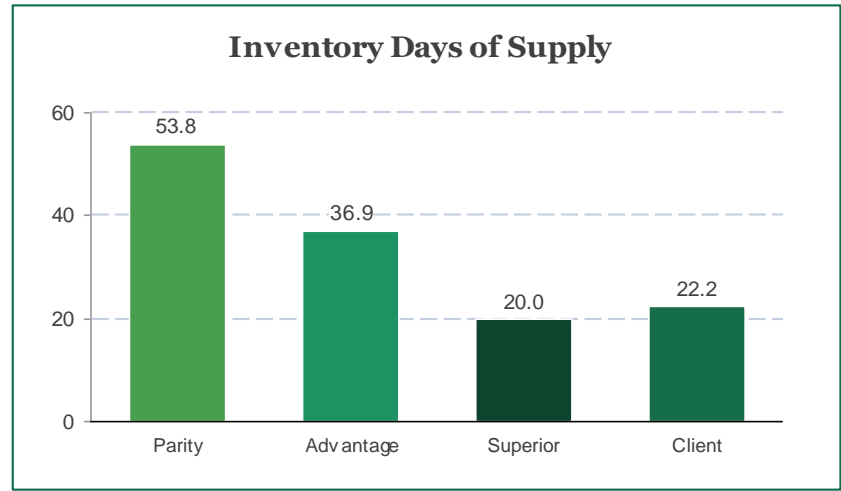
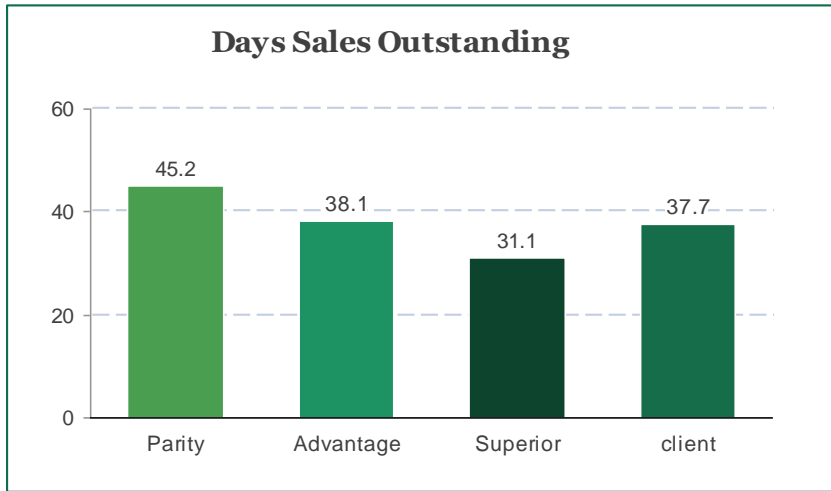
■ Worse than Parity   
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### Observations

- TBD.

# Day Sales Outstanding and Inventory Days of Supply

Example Readout, Contains Mock Data for Illustrative purposes only



## Observations

- TBD.

# Inventory Management and Forecast Accuracy

Example Readout, Contains Mock Data for Illustrative purposes only

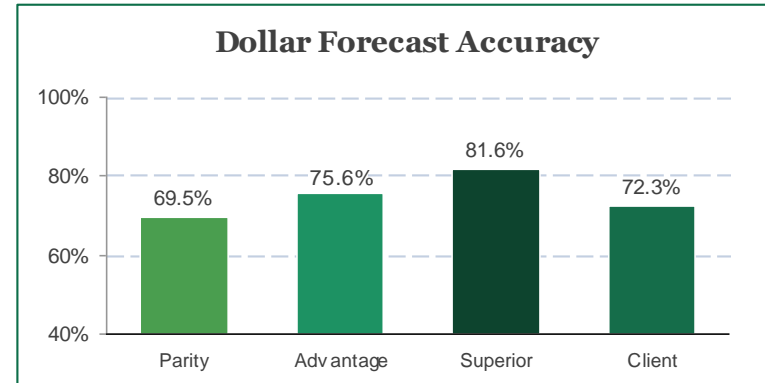
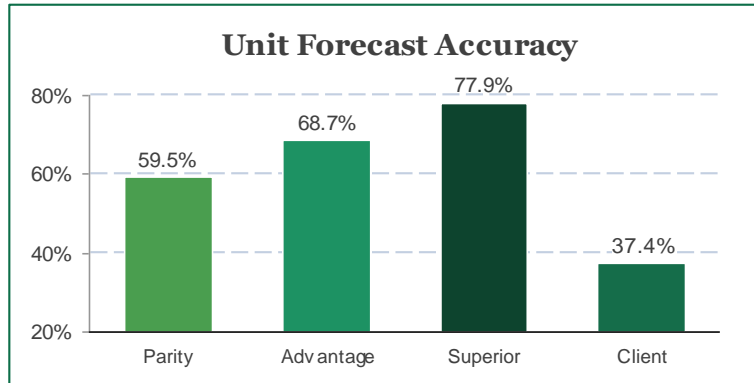
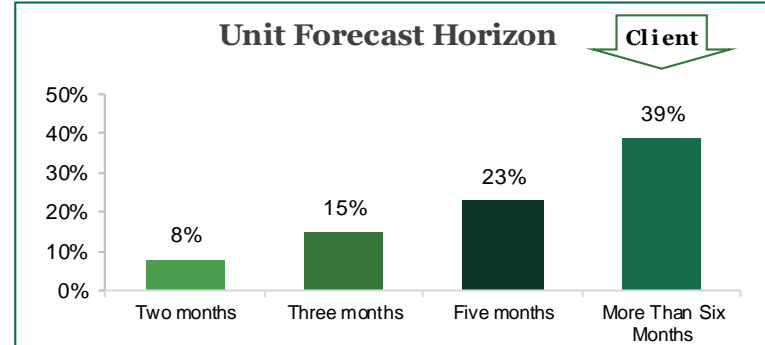
Attribute: Asset Management Efficiency

CORmark

## Inventory Days of Supply

Metric	Parity	Advantage	Superior	Client
Total Inventory Days of Supply	53.8	36.9	20.0	22.3
Raw Material Days of Supply	16.7	NA	NA	7.3
WIP Days of Supply	3.3	NA	NA	0.0
Finished Good Days of Supply	37.8	20.0	2.2	5.5
Inventory Turns	4.9	3.7	2.5	11.9

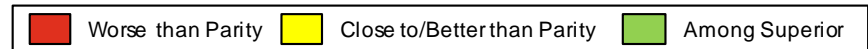
■ Worse than Parity  
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## Observations

- TBD.

Metric (%)	Parity	Advantage	Superior	Client
Plant Utilization	63.8%	72.8%	81.9%	51.0%
Production Plan Adherence	81.2%	83.1%	85.0%	84.7%
First Pass Yield	81.6%	81.7%	81.8%	83.1%
Overall Equipment Effectiveness (OEE)	72.3%	77.5%	83.6%	85.0%
Unplanned Downtime	3.6%	2.2%	0.9%	0.0%



## Observations

- TBD.



Example Readout; Contains Mock Data for Illustrative purposes only

Metric (%)	Parity	Advantage	Superior	Client
Product Sales Returned by Customers	1.02%	0.60%	0.17%	0.85%
Material Spend Returned to Vendor	1.53%	0.94%	0.34%	4.25%
First Time Fix Rate	78.20%	NA	NA	69.45%

■ Worse than Parity
 ■ Close to/Better than Parity
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## Observations

- TBD.

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# Benchmarking Results

*Detailed Benchmark Results - Complexity*

## Complexity is assessed along multiple dimensions

- High levels of supply chain complexity, left unmanaged, reduce operational performance and lead to higher costs
- Complexity-driven costs are often hard to identify, making it difficult to address



# Product Portfolio Complexity

Example Readout; Contains Mock Data for Illustrative purposes only

Metric (Normalized by Client's Revenue)	0%-20% Very Low	20%-40% Low	40%-60% Median	60%-80% High	80%-100% Very High	Client
Number of Finished Product Item Codes	2,120	3,808	7,019	<b>C</b> 15,580	31,801	12,222
Number of finished product item codes purchased in a finished good state from a co-manufacturer or other 3rd party	2,149	2,579	3,297	<b>C</b> 6,313	7,105	3,935
New Product Introductions	41	283	733	1,652	<b>C</b> 6,101	2,490
End of Life products retired during the year	54	836	<b>C</b> 2,249	3,754	6,406	953

**C** Client

## Observations

- TBD.

# Supplier Base Complexity

Example Readout; Contains Mock Data for Illustrative purposes only

Complexity  
CORmark

Metric (Normalized by Client's Revenue)	0%-20% Very Low	20%-40% Low	40%-60% Median	60%-80% High	80%-100% Very High	Client
Number of Direct Material Suppliers	94 <b>C</b>	341	636	1,244	3,698	116
Number of Direct Material Suppliers that account for 80% of material expenditure	<b>C</b> 9	14	39	58	137	9
Number of Raw material item codes	896	7,204	10,475	20,113	<b>C</b> 26,606	26,350
Number of sub assembly item codes	45	552	857	1,267 <b>C</b>	5,610	1,700
Number of packaging item codes	148	309	399	933	<b>C</b> 3,653	2,550

**C** Client

## Observations

- TBD.

# Manufacturing and Customer Base Complexity

Example Readout; Contains Mock Data for Illustrative purposes only

Metric (Normalized by Client's Revenue)	0%-20% Very Low	20%-40% Low	40%-60% Median	60%-80% High	80%-100% Very High	Client
Number of manufacturing locations outsourced	1	3	5	<b>C</b> 8	15	8

**C** Client

Metric (Normalized by Client's Revenue)	0%-20% Very Low	20%-40% Low	40%-60% Median	60%-80% High	80%-100% Very High	Client
Number of active customers	192	799	1,180	8,157	8,687 <b>C</b>	25,176
Number of active customers that account for 80% of revenue	20	32	102	1,213	1,443 <b>C</b>	2,319
Number of orders received	<b>C</b> 61,632	88,885	106,092	152,680	215,704	47,904
Number of locations performing order entry and management locations	<b>C</b> 2	9	13	17	23	1

## Observations

- TBD.

# Distribution and IT Complexity

Example Readout; Contains Mock Data for Illustrative purposes only

Complexity  
CORmark

Metric (Normalized by Client's Revenue)	0%-20% Very Low	20%-40% Low	40%-60% Median	60%-80% High	80%-100% Very High	Client
Number of shipments/delivery notes	25,593 <b>C</b>	67,935	145,913	512,070	2,147,239	53,040
Number of ship to locations	795	2,462	<b>C</b> 16,051	26,359	48,481	13,336
Number of ship from locations	<b>C</b> 3	5	9	29	122	3
Number of distribution centers	2 <b>C</b>	4	7	19	1,981	3
Number of logistics/transportation suppliers	6	14	21	37 <b>C</b>	157	41

Metric (Normalized by Client's Revenue)	0%-20% Very Low	20%-40% Low	40%-60% Median	60%-80% High	80%-100% Very High	Client
Number of unique systems/applications	7 <b>C</b>	25	55	82	110	13

**C** Client

## Observations

- TBD.

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Mock Data for Illustrative  
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# Benchmarking Results

Detailed Benchmark Results - Qualitative Practices

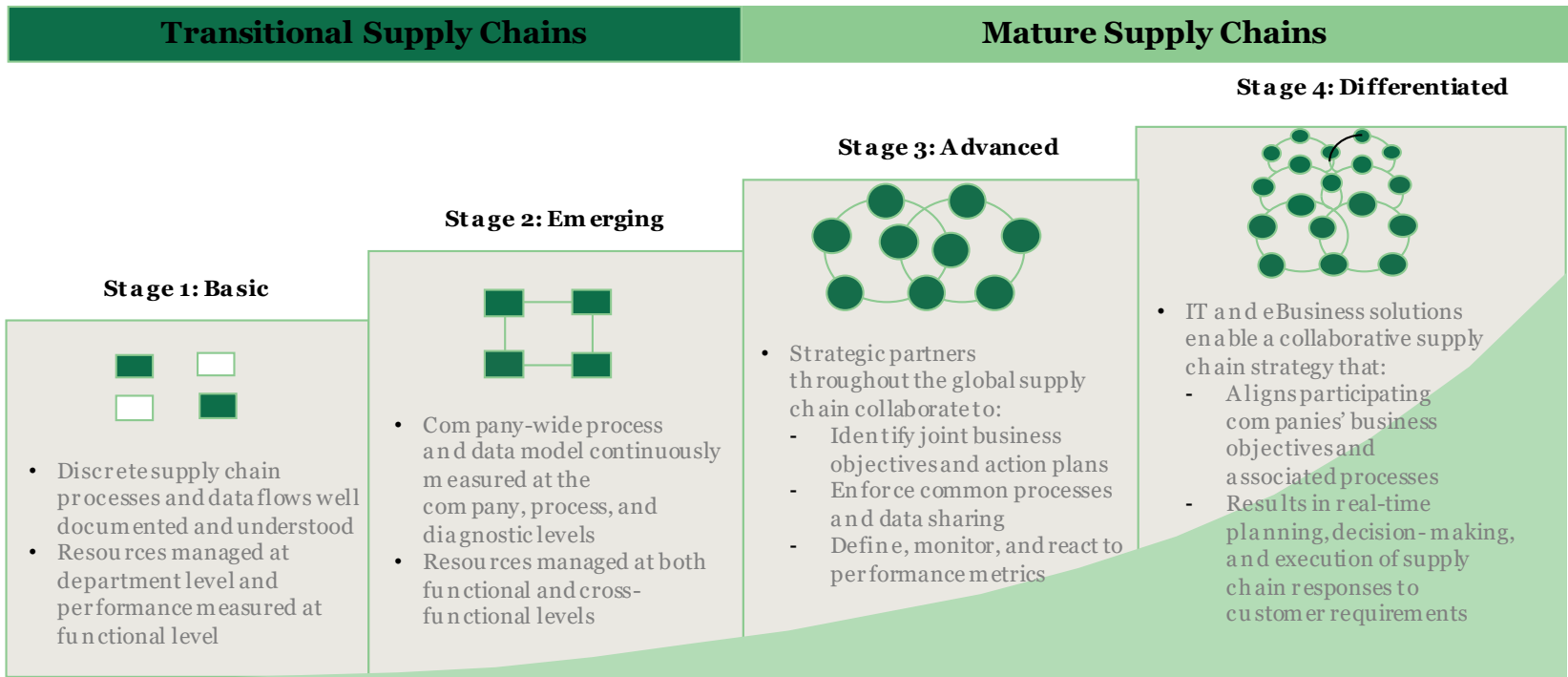


# Overview of PwC's Qualitative Practices Methodology

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The qualitative practice assessment framework evaluates how well the organization is integrating processes and information systems across the supply chain



# Client Self Assessed Practices

## Level 1 Scorecard - Overall Supply Chain Practice Maturity

Example Readout; Contains Mock Data for Illustrative purposes only

	Stage 1	Stage 2	Stage 3	Stage 4
STRATEGY		▲ ★		
PLAN			★ ▲	
SOURCE		★	▲	
MAKE			★	▲
DELIVER			▲ ★	
RETURN			★ ▲	

★ = Industry Average  
▲ = Client

# Client Self Assessed Practices

## Level 2 Scorecard - Strategy

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Practice Assessment  
CORmark

	Stage 1	Stage 2	Stage 3	Stage 4
STRATEGY		▲ ★		
Supply Chain Strategy		▲ ★		
Supply Chain Risk Management		▲ ★		
Supply Chain Performance Management			▲ ★	
Supply Chain Process Architecture			▲ ★	
Supply Chain Talent Management		▲ ★		

★ = Industry Average  
▲ = Client

# Client Self Assessed Practices

## Level 2 Scorecard - Plan

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Practice Assessment  
CORmark

	Stage 1	Stage 2	Stage 3	Stage 4
<b>PLAN</b>			★ ▲	
<b>Sales, Inventory, &amp; Operations Planning (SIOP)</b>			★ ▲	
<b>Demand Planning</b>			▲ ★	
<b>Supply Planning</b>			★ ▲	
<b>Inventory Management</b>			★ ▲	

★ = Industry Average  
▲ = Client

# Client Self Assessed Practices

## Level 2 Scorecard - Source

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Practice Assessment  
CORmark

	Stage 1	Stage 2	Stage 3	Stage 4
<b>SOURCE</b>		★	▲	
<i>Procurement Positioning</i>			★	▲
<i>Sourcing Processes</i>		▲	★	
<i>Order Processing</i>		▲	★	
<i>P2P Systems</i>		▲	★	
<i>Spend Data</i>		▲	★	
<i>Procurement Organization Structure</i>			★	▲
<i>Procurement and Benefits Management</i>			▲	★
<i>Supply Risk Management</i>		▲	★	

★ = Industry Average  
▲ = Client

# Client Self Assessed Practices

## Level 2 Scorecard - Make

Example Readout; Contains Mock Data for Illustrative purposes only

Practice Assessment  
CORmark

	Stage 1	Stage 2	Stage 3	Stage 4
<b>MAKE</b>			★	▲
<b>Product Planning and Management</b>			★	▲
<b>Maintenance Management</b>			★	▲
<b>Production Quality Management</b>				▲
<b>Manufacturing Strategy</b>			★	▲
<b>Material Issue, Move &amp; Tracking</b>			★	▲

★ = Industry Average  
▲ = Client

# Client Self Assessed Practices

## Level 2 Scorecard - Deliver

Example Readout; Contains Mock Data for Illustrative purposes only

Practice Assessment  
CORmark

	Stage 1	Stage 2	Stage 3	Stage 4
DELIVER			▲ ★	
Warehouse			★ ▲	
Transportation		▲	★	
Network Design		★	▲	
Order Entry & Scheduling			▲ ★	
Invoicing & Cash Collection			▲ ★	

★ = Industry Average

▲ = Client

# Client Self Assessed Practices

## Level 2 Scorecard -Return

Example Readout; Contains Mock Data for Illustrative purposes only

Practice Assessment  
CORmark

	Stage 1	Stage 2	Stage 3	Stage 4
<b>RETURN</b>			★▲	
<b>Service Parts Planning</b>		★		▲
<b>Reverse Logistics</b>			★▲	
<b>Warranty and Repair</b>		★		▲
<b>Field Services Operations</b>			★	▲

★ = Industry Average  
▲ = Client



Example Readout; Contains  
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# APPENDIX

## *About PwC*

## PwC Benchmarking Services



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**Glenn Heywood**  
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## PwC Benchmarking Services



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## PwC Benchmarking Services



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**Varun George Varghese**  
**Senior Associate**  
**Operational Effectiveness**

## *Plan*

Processes that balance aggregate demand and supply to develop a course of action which best meets sourcing, production and delivery requirements

## *Source*

Processes that procure goods and services to meet planned or actual demand

## *Make*

Processes that transform product to a finished state to meet planned or actual demand

## *Deliver*

Processes that provide finished goods and services to meet planned or actual demand, typically including order management, transportation management, and distribution management

## *Return*

Processes associated with returning or receiving returned products for any reason. These processes extend into post-delivery customer support

## *Reliability*

**Delivery Performance to Request Date:** The percentage of orders that are fulfilled on or before the customer's requested date used as a measure of responsiveness to market demand. Delivery measurements are based on the date a complete order is shipped or the ship-to date of a complete order. A complete order has all items on the order delivered in the quantities requested. An order must be complete to be considered fulfilled. Multiple line items on a single order with different planned delivery dates constitute multiple orders, and multiple planned delivery dates on a single line item also constitute multiple orders.

**Delivery Performance to Commit Date:** The percentage of orders that are fulfilled on or before the Commit date, used as a measure of internal scheduling systems effectiveness. Delivery measurements are based on the date a complete order is shipped or the ship-to date of a complete order. A complete order has all items on the order delivered in the quantities requested. An order must be complete to be considered fulfilled. Multiple line items on a single order with different planned delivery dates constitute multiple orders, and multiple planned delivery dates on a single line item also constitute multiple orders.

**Perfect Order Fulfilment:** The percentage of orders meeting delivery performance with complete and accurate documentation and no delivery damage. Components include all items and quantities on-time using the customer's definition of on-time, and documentation - packing slips, bills of lading, invoices, etc.

## *Responsiveness*

Order Fulfilment Cycle Times (OFCT) includes any and all elapsed time from customer signature through order receipt, order entry, engineering and design time, start and complete manufacturing, pick/pack, transportation, customer receipt, and installation complete. Please answer in calendar days or fractions of calendar days for the calendar year. Only fill in for the relevant manufacturing strategy used at your company.

The process of manufacturing in a make-to-order environment adds value to products through mixing, separating, forming, machining, and chemical processes for a specific customer order. Products are completed, built or configured only in response to a customer order, the customer order reference is attached to the production order, attached to or marked on the product upon completion of the make process and referenced when transferring the product to Deliver. The product is identifiable throughout the Make process, as made for a specific customer order.

Examples of alternative or related names for Make-to-Order are: Build-to-Order (BTO), Assemble-to-Order (ATO), Configure-to-Order (CTO), and postponement.

## *Agility*

Upside Supply Chain Flexibility: Number of days required to achieve an unplanned sustainable 20% increase in quantities delivered. The calculation of supply chain flexibility requires the calculation to be the least time required to achieve the unplanned sustainable increase when considering Source, Make, and Deliver components.

Upside Supply Chain Adaptability: Maximum sustainable percentage increase in quantity delivered that can be achieved in 30 days. Component metrics can be improved in parallel, and as a result, this calculation requires the result to be the least increase in quantity sustainable in 30 days (30 days may be unobtainable or too conservative for certain industries). This increase is unforeseen and must be sustainable. Consider the typical products managed within the predominant product line.

## ***Total Supply Chain Management Cost***

Total cost to manage order processing, acquire materials, manage inventory, and manage supply-chain finance, planning, and IT costs, as represented as a percent of revenue. Accurate assignment of IT-related cost is challenging. It can be done using Activity-Based-Costing methods, or based on more traditional approaches. Allocation based on user counts, transaction counts, or departmental headcounts are reasonable approaches. The emphasis should be on capturing all costs, whether incurred in the entity completing the survey or incurred in a supporting organization on behalf of the entity. Reasonable estimates founded in data were accepted as a means to assess overall performance. All estimates reflected fully burdened actuals inclusive of salary, benefits, space and facilities, and general and administrative allocations.

## ***Asset Management Efficiency***

**Total Inventory Days of Supply:** Total gross value of inventory at standard cost before reserves for excess and obsolescence. Includes only inventory that is on the books and currently owned by the business entity. Future liabilities such as consignments from suppliers are not included.

**Average Payment Period:** The average time from receipt of production-related materials and payment for those materials. Production-related materials are those items classified as material purchases and included in the Cost of Goods Sold (COGS) as raw material purchases. (An element of Cash-to-Cash Cycle Time)

**Days Sales Outstanding:** Measurement of the average collection period (time from invoicing to cash receipt).

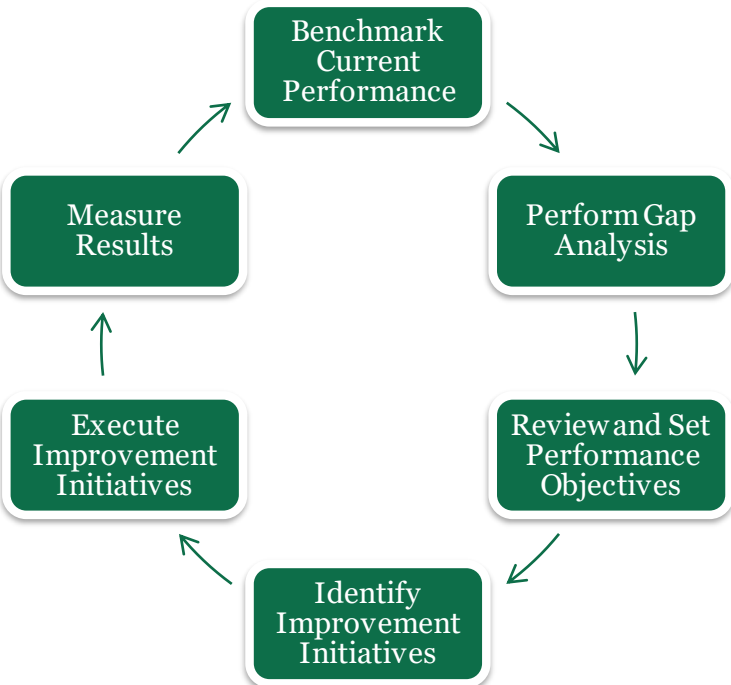
**Cash-to-Cash Cycle Time:** The time it takes for cash to flow back into a company after it has been spent for raw materials

Benchmarking is used as a guide to get a fact-based assessment of the opportunities for improvement and the value from achieving these results:

- Understand a company's position relative to population's Parity, Advantage and Superior
  - *Parity* indicates the 50th percentile of performance in the SCORmark database
  - *Advantage* is the performance level halfway between Parity and Superior (i.e., 70th percentile).
  - *Superior* indicates the 90th percentile of companies in the database.
- Provide a basis of comparison against similar Supply Chains
- Provide insight into potential opportunities for growth and improvement
- Establish performance targets

# Benchmarking is a powerful tool, because “you can’t manage what you don’t measure”; it is an early step in operations improvement

Example Readout; Contains Mock Data for illustrative purposes only

High-Level Benchmarking Process	High-Level Benchmarking Benefits
<ul style="list-style-type: none"> <li>• Compare company performance internally and externally to understand areas of strengths and weaknesses</li> <li>• Use standard metrics and compare company practices vs. best practices</li> </ul>  <pre> graph TD     A[Benchmark Current Performance] --&gt; B[Perform Gap Analysis]     B --&gt; C[Review and Set Performance Objectives]     C --&gt; D[Identify Improvement Initiatives]     D --&gt; E[Execute Improvement Initiatives]     E --&gt; F[Measure Results]     F --&gt; A     </pre>	<p><b><i>Provide a common language</i></b></p> <ul style="list-style-type: none"> <li>• Leverage defined metrics for comparison</li> <li>• Leverage standard calculations</li> <li>• Leverage standard frameworks for analysis</li> </ul> <hr/> <p><b><i>Understand current performance</i></b></p> <ul style="list-style-type: none"> <li>• Compare to relevant external benchmark comparison group</li> <li>• Compare to median and best-in-class</li> <li>• Compare performance internally between business units</li> </ul> <hr/> <p><b><i>Identify and quantify opportunities</i></b></p> <ul style="list-style-type: none"> <li>• Establish performance targets</li> <li>• Establish, prioritize initiatives to achieve targets</li> </ul>



# A Logical Next Step Is To Prioritize Improvements and Take Action!

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PwC is available to help continue supply chain improvement efforts. We are:

## Objective and factual

- Supports senior management to make key decisions
- Acts as a “blind trust” manager where information can not be shared

## Focused on the value proposition

- Keeps all decisions focused on highest value creation in shortest time frame
- Works across functions and processes where organizations have limits

## Experienced in managing the process

- Provides expertise in critical path management: Internal staff do not have a learning curve
- Understands human dimension of change

## Committed to knowledge transfer

- Ensures “leave behind” process
- Migrates from “player/coach” to “coach/cheerleader”: Positions owners to be successful

*We welcome the opportunity for further conversations about improvement projects as well as engaging with other divisions who might also be interested in benchmarking*

# PwC continues to earn top recognition from clients, industry analysts, and competitors

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236,000 professionals worldwide  
158 countries and 776 locations  
Broad client base across Fortune 1000  
Works with Private and Public Companies

No. 1

Global Business Consulting firm  
*IDC & Kennedy Information*

85%

Fortune Global 500 are PwC clients

Leader

Gartner CRM Service Provider

No. 1

Product and Service Operations  
*Kennedy Information*

No. 1

In Innovation Solutions  
*Kennedy Information*

No. 1

In Operations Strategy  
*IDC (2012)*

No. 1

Global Mergers & Acquisitions Advisory  
*Kennedy Information*

No. 1

Of 8 named to Kennedy Vanguard of Supply Chain Consulting  
*Kennedy Information*

Enterprise Applications Partnerships  
SAP  
Oracle  
Salesforce.com  
Jive

*We have an unparalleled combination of global scale and functional expertise*

# PwC + Strategy& is a recognized, global leader in operations consulting and supply chain benchmarking

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SCORmark

PwC established the term “supply chain management” (1982) and co-lead development of the SCOR Model (1996), we continue to lead the industry



[1] Gartner Research, “Magic Quadrant for Oracle Applications Implementation Services, Worldwide,” September 2013, Alex Soejarto, Susame Matson, [2] “Magic Quadrant for Business Operations Consulting Services, Worldwide,” December 23, 2013, Dana Stiffler, Gartner does not endorse any vendor, product, or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings. Gartner research publications consist of the opinions of Gartner’s research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose; [3] Kennedy Research, “Manufacturing & Production Strategy Consulting,” [4] “Change Management Consulting Market,” [5] New Market Entry Strategy Consulting,” [6] “Supply Chain Risk Management Consulting 2012-2015,” © Kennedy Information LLC. Reproduced under license. [7,8] IDC, IDC MarketScape: Worldwide Operations Consulting Services 2012 Vendor Analysis, Cushing Anderson, July 2012 (IDC #236022).

# PwC brings integrated best of the breed supply chain capabilities and thought leadership to its clients

Example Readout; Contains Mock Data for Illustrative purposes only

CORmark

### Business Strategy

- Pre-eminent strategic management consulting firm
- Explicit focus on pragmatic capability driven transformation and growth
- Broad operational design capabilities




### Operational Excellence

- Leading Operations Strategy Consulting Firm
- Deep expertise in supply chain design and implementation
- Unique benchmarking capabilities through PwC's Performance Measurement Group




*"Category of One"*




### Technology Strategy & Implementation

- Dominant technology strategy and eBusiness design firm
- Explicit focus on strategic use of technology architecture and capability planning



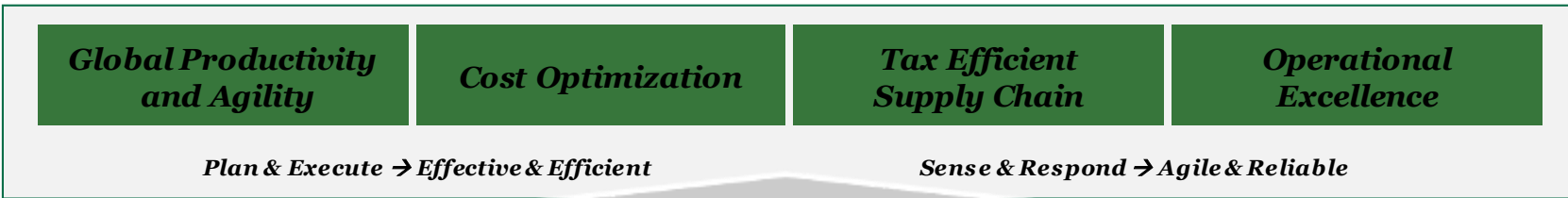
### Digital /Omnichannel Leadership

- Thought-leading boutiques in social media and digital
- Extensive experience in consumer marketing and engagement design




# We help clients address end-to-end supply chain performance challenges while thinking like a “ruthless competitor”

Example Readout; Contains Mock Data for Illustrative purposes only



Product Life Cycle Mgt	Operations Strategy & Transformation	Quality Systems	Supply Chain Planning	Procurement & Sourcing	Logistics and Distribution	Operational Excellence
<ul style="list-style-type: none"> <li>• Design for supply chain</li> <li>• Design collaboration</li> <li>• NPI process design and optimization</li> <li>• Technology transfer &amp; scale up</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment &amp; analysis</li> <li>• Network optimization</li> <li>• Operational strategy</li> <li>• Performance metrics</li> <li>• Risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Culture change</li> <li>• Design controls</li> <li>• Assessment</li> <li>• Consent decree remediation</li> <li>• Governance &amp; infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Demand planning</li> <li>• Supply planning</li> <li>• Sales and operations planning</li> <li>• Clinical supply chain</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic sourcing</li> <li>• Procurement technology</li> <li>• Procurement transformation</li> <li>• Contract manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Logistics strategy</li> <li>• Logistics operations</li> <li>• Transportation</li> <li>• Customs &amp; duties</li> <li>• Track/trace e-pedigree</li> </ul>	<ul style="list-style-type: none"> <li>• Lean operations</li> <li>• Cycle time reduction</li> <li>• Inventory optimization</li> <li>• Cost reduction</li> </ul>



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# Thank you

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