



23 October 2006

# Supply Chain Benchmarking

Mark Hermans



*Management  
Consultants*

Where Innovation Operates

# Agenda

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**Introduction to PRTM**

**Supply Chain Benchmarking and Metrics**

**Impact of Congestion on Business Performance**

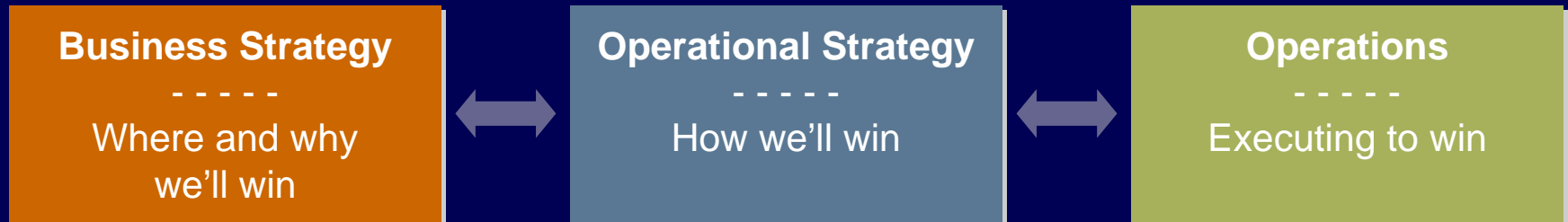
**Conclusions**

**Q&A**

# Our Expertise: Operational Strategy

## PRTM is the premier operational strategy consulting firm

- Marketplace realities have created new operational requirements
- Without the right operational strategy, even strong business strategies fail



## We focus on the critical link between business strategy and execution

- Operational strategy structures your business operations and economics for competitive advantage
- We help you establish a winning operational strategy...and realize it

# Supply Chain Innovator

Primary architects of the Supply Chain Operations Reference-model® (SCOR®)

Co-founded the Supply-Chain Council—which now has close to 1,000 corporate members worldwide ([www.supply-chain.org](http://www.supply-chain.org))

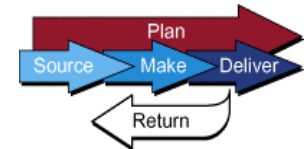
Founded The Performance Measurement Group ([www.pmgbenchmarking.com](http://www.pmgbenchmarking.com)) to offer secure online benchmarking services

Recently wrote *Strategic Supply Chain Management*, a comprehensive and practical guide to supply chain management

*“This book will serve as a timeless tool for those looking to transform their organization’s supply chain into a sustainable competitive advantage.”*

— Jim Miller, Cisco Systems, Vice President, Operations

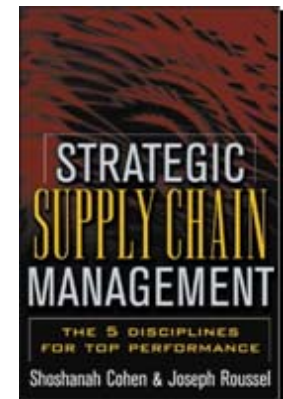
PRTM has conducted more than 1,000 supply chain projects



SCOR  
Supply-Chain Council

The  
Performance  
Measurement  
Group, LLC

A PRTM Company





# Introduction to Supply Chain Benchmarking and Metrics

# Fact-Based Supply Chain Benchmarking

PRTM's Performance Measurement Group (PMG) Supply Chain Benchmarking Database is the industry standard

(Selected Benchmarking Participants)



## Quantitative Fact-Based Performance Scorecards

Company X Performance		Supply Chain Performance Versus Custom Population				
Key Perspectives	Level 1 Metrics	0 – 20% Major Opportunity	20 – 40% Disadvantage	40 – 60% Average Or Median	60 – 80% Advantage	80 – 100% Best-In-Class
Customer-Facing	Delivery Performance to Request			89% <b>90%</b>		<b>99%</b>
	Fill Rate		86%	<b>89%</b>		<b>100%</b>
	Order Fulfillment Lead Time			5.0 Days <sup>4.9</sup>		<b>2.3 Days</b>
	Perfect Order Fulfillment	Sample Data Only		81% <sup>86%</sup>		<b>98%</b>
Flexibility and Responsiveness	Upside Flexibility (20% Increase)			28 Days <sup>20</sup>		<b>8 Days</b>
	Supply Chain Response Time			115 Days <sup>101</sup>		<b>68 Days</b>
Internal-Facing	Cost		14.5%	<b>8.3%</b>		<b>6.1%</b>
	Assets					
	Supply Chain Management Cost		14.5%	<b>8.3%</b>		<b>6.1%</b>
	Total Inventory Days of Supply	106		<b>64 Days</b>		<b>39 Days</b>
	Cash-to-Cash Cycle time	152		<b>86 Days</b>		<b>57 Days</b>

## Qualitative Process, Practice and Systems Maturity Assessments

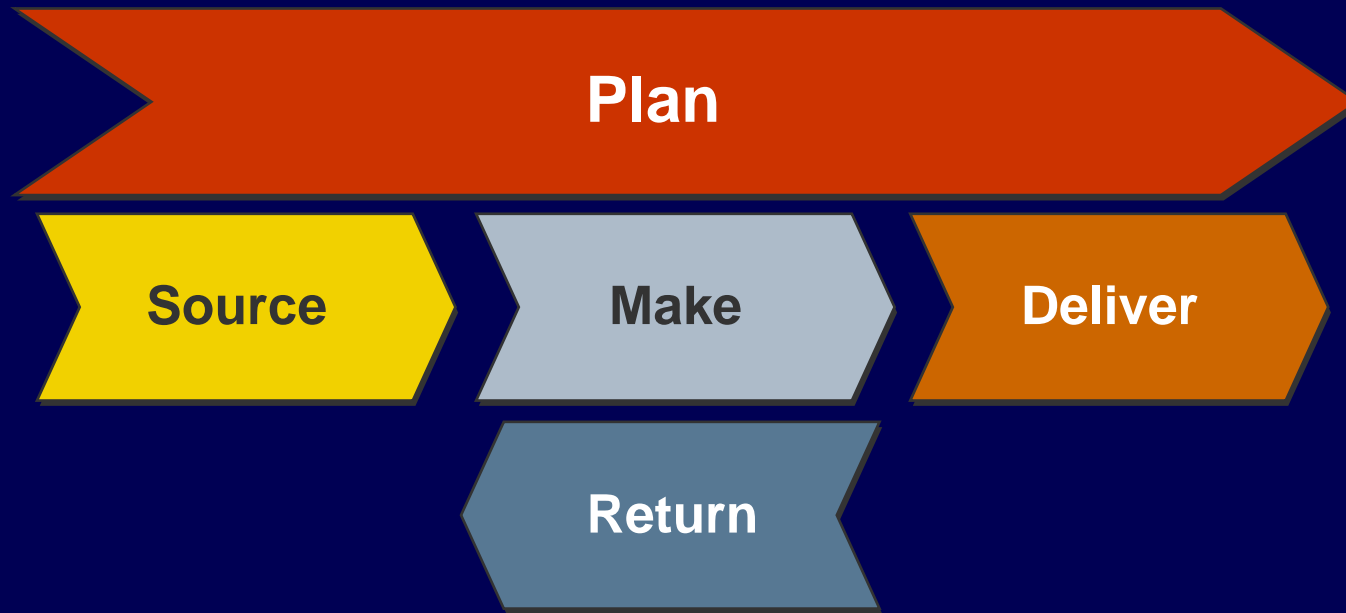
		Stage 1	Stage 2	Stage 3	Stage 4
		Functional Focus	Internal Integration	External Integration	Cross-Enterprise Collaboration
PLAN	Strategy				★
	Demand Planning		●	★	
	Supply Planning		●	★	
SOURCE	Demand/Supply Balancing & Decision-making	▲	●	★	★
	Strategy		●	▲	★
	Commodity & Process Management		●	▲	★
MAKE	Supplier Development/Management		●	▲	★
	Organization and Infrastructure		●	▲	★
	Manufacturing Strategy	▲	●	▲	★
DELIVER	Production Scheduling		●	▲	★
	Material Issue, Movement and Tracking		●	▲	★
	Manufacturing Process Control		●	▲	★
OVERALL	Enable		●	▲	★
	Order Entry & Scheduling		●	▲	★
	Warehousing, Transportation and Delivery		●	▲	★
OVERALL	Invoicing and Cash Collection		●	▲	★
	Supply Chain Strategy	▲	●	▲	★
	Supply Chain Performance Management	▲	●	▲	★
	Supply Chain Processes	▲	●	▲	★
	Supply Chain Organization	▲	●	▲	★

★ - Best-in-Class ▲ - Your Organization ● - Average

# Supply-Chain Operations Reference Model

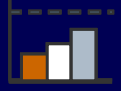


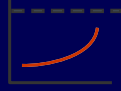
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The SCOR® Framework Encompasses the Full Supply Chain, Including Customer and Supplier Collaboration



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# Balanced Set of Performance Metrics

<b>Level 1 SCOR® Supply Chain Management Metrics</b>	 Delivery Performance/ Responsiveness	 Flexibility	 Cost	 Asset Management
<b>Delivery Performance</b>	✓			
<b>Order Fulfillment Lead Time</b>	✓	✓		
<b>Production Flexibility</b>		✓		
<b>Total Supply Chain Management Cost</b>			✓	
<b>Inventory Days of Supply</b>				✓
<b>Cash-to-Cash Cycle Time</b>				✓
<b>Net Asset Turns</b>				✓



# Company Level 1 Scorecard

Level 1 SCOR Supply Chain Management Metrics	Delivery Performance/Responsiveness	Flexibility	Cost	Asset Management
Delivery Performance	✓			
Order Fulfillment Lead Time	✓	✓		
Production Flexibility		✓		
Total Supply Chain Management Cost			✓	
Inventory Days of Supply				✓
Cash-to-Cash Cycle Time				✓
Net Asset Turns				✓



Key Perspectives	Metrics	Performance Versus Comparison Population					Your Org.
		0–20% Major Opportunity	20–40% Disadvantage	40–60% Median	60–80% Advantage	80–100% Best in Class	
Customer-Facing Metrics	On-time Delivery to Request (%)			91.0%		98.1%	
	On-time Delivery to Commit (%)			94.0%		99.7%	
	Order Fulfillment Lead Time (days)			8.0		2.6	
	Upside Production Flexibility (days)			65		18.5	
Internal-Facing Metrics	Total Supply Chain Management Cost (% of Product Revenue)			12.2%		6.4%	
	Inventory Days of Supply			48.9		21.2	
	Cash-to-Cash Cycle Time (days)			59.0		28.1	
	Net Asset Turns			1.4		2.8	

◆ Example Company Data

★ Improvement Goals



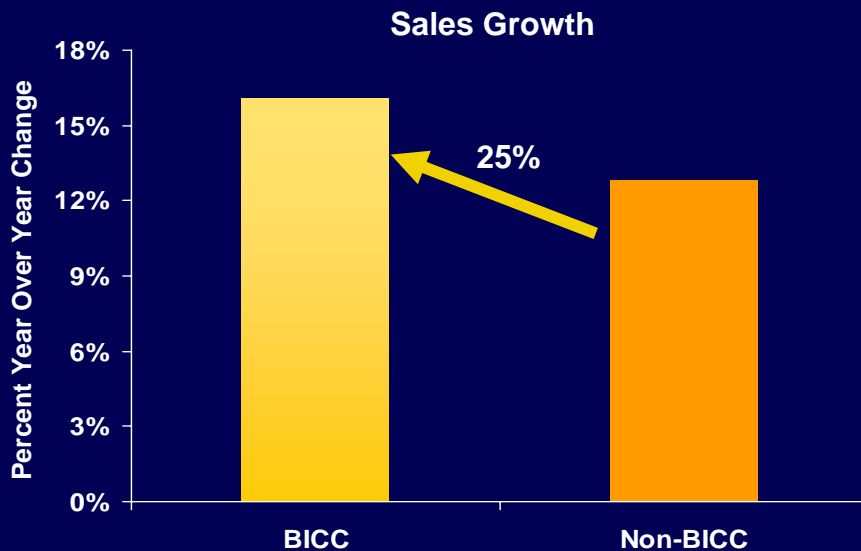
# Impact of Congestion on Business Performance

# Importance of Supply Chain Management

It improves the top line



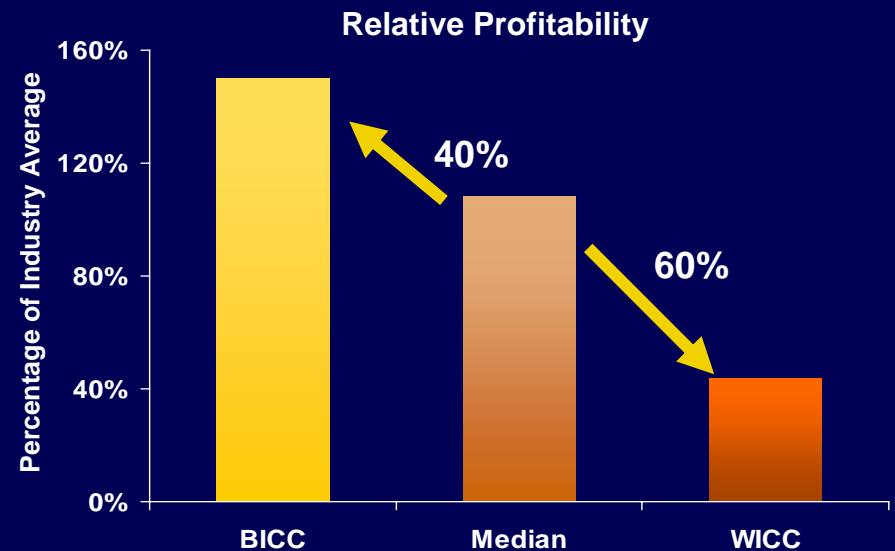
Best-in-class companies have 25% higher sales growth than other companies



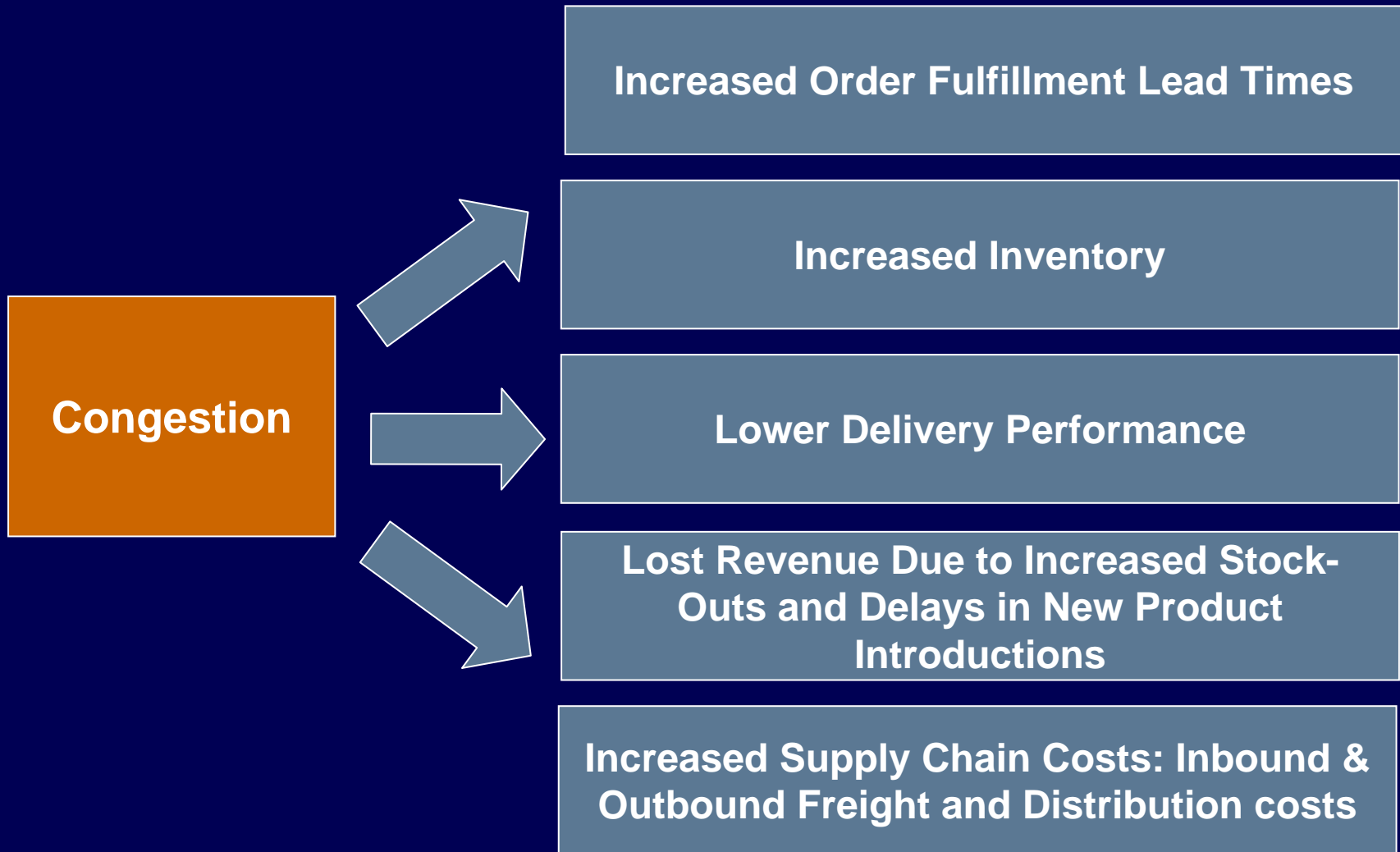
It improves the bottom line



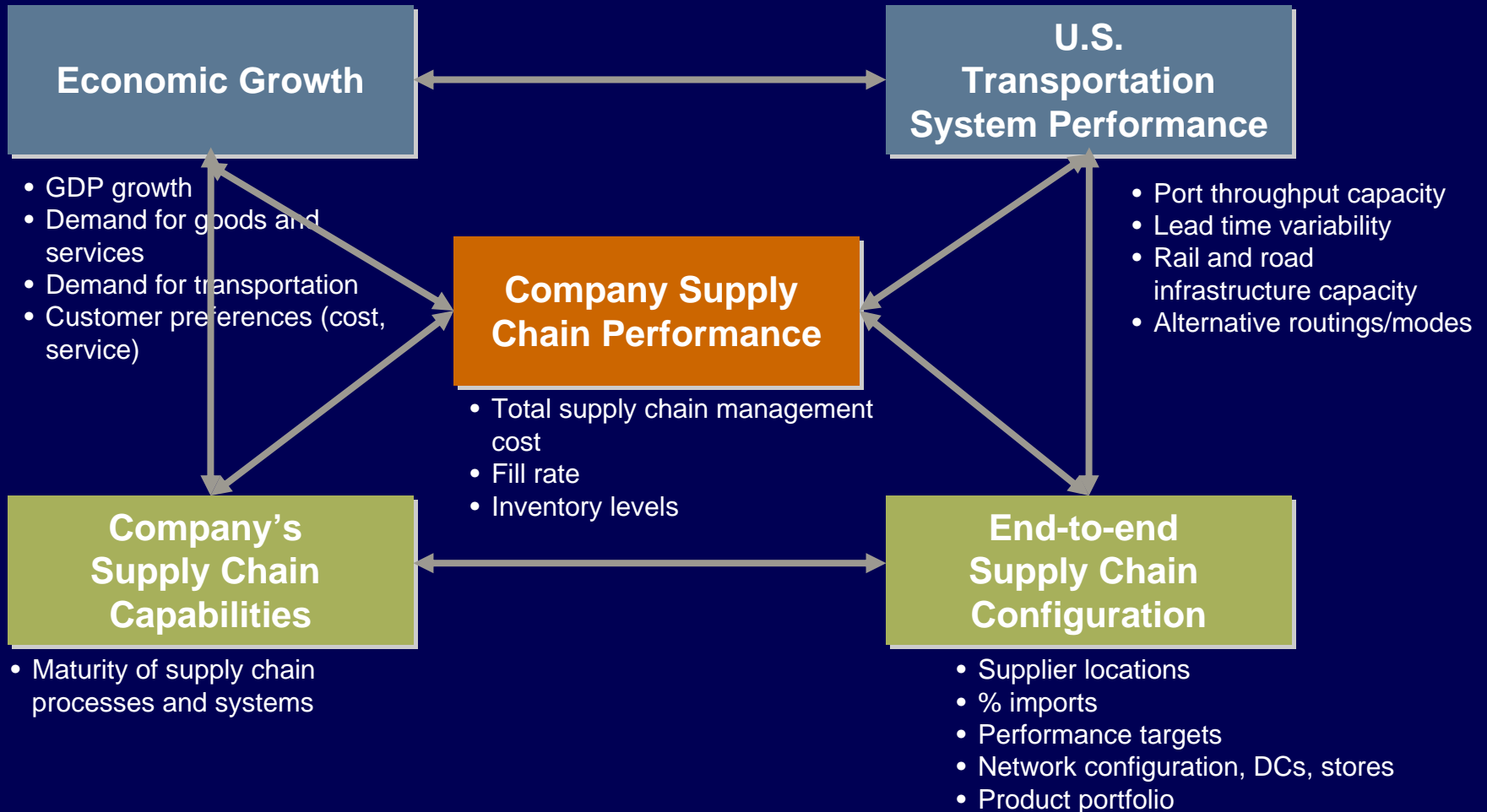
Best-in-class companies have 40% higher profitability than median companies



# Impact of Congestion on Company Performance

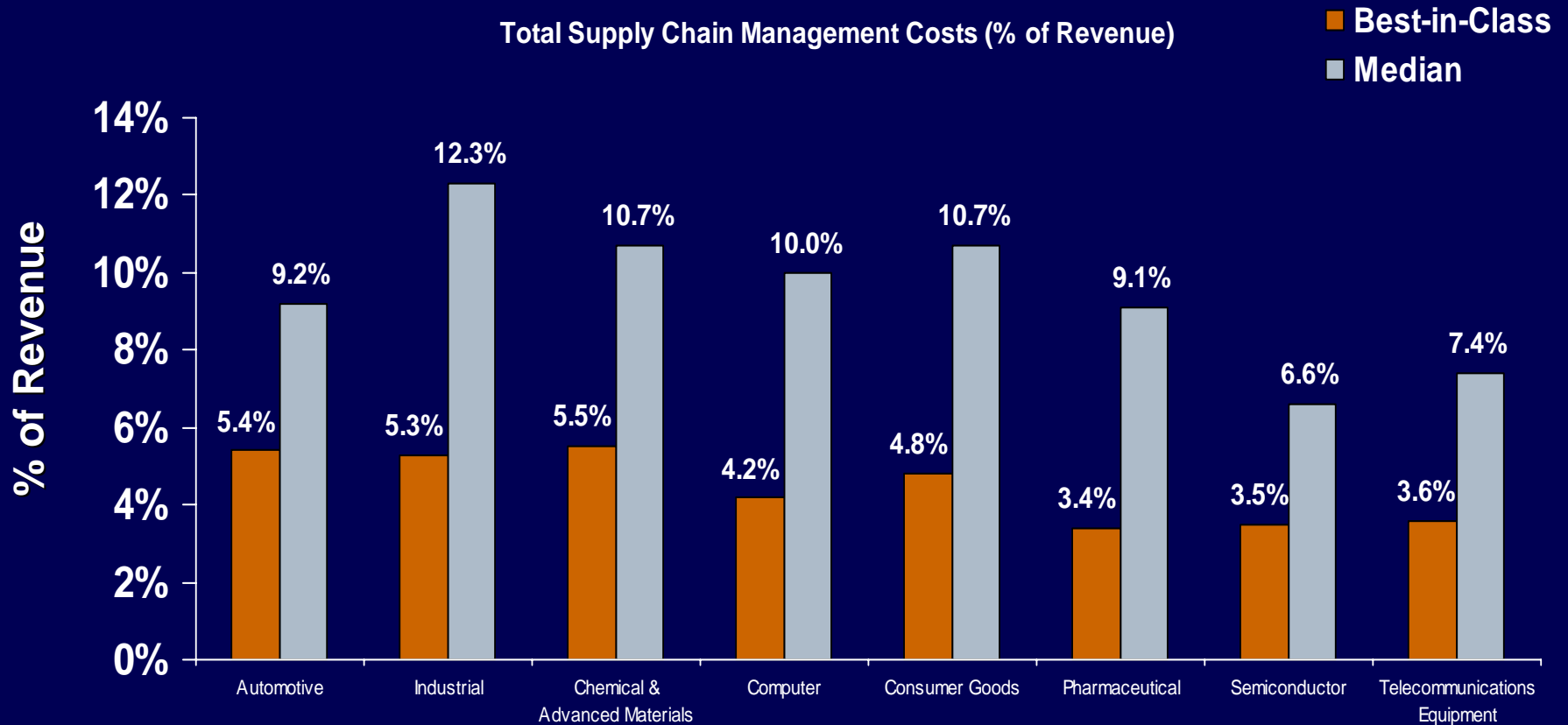


# Many Factors Impact Supply Chain Performance



Note: sample factors; not a complete overview

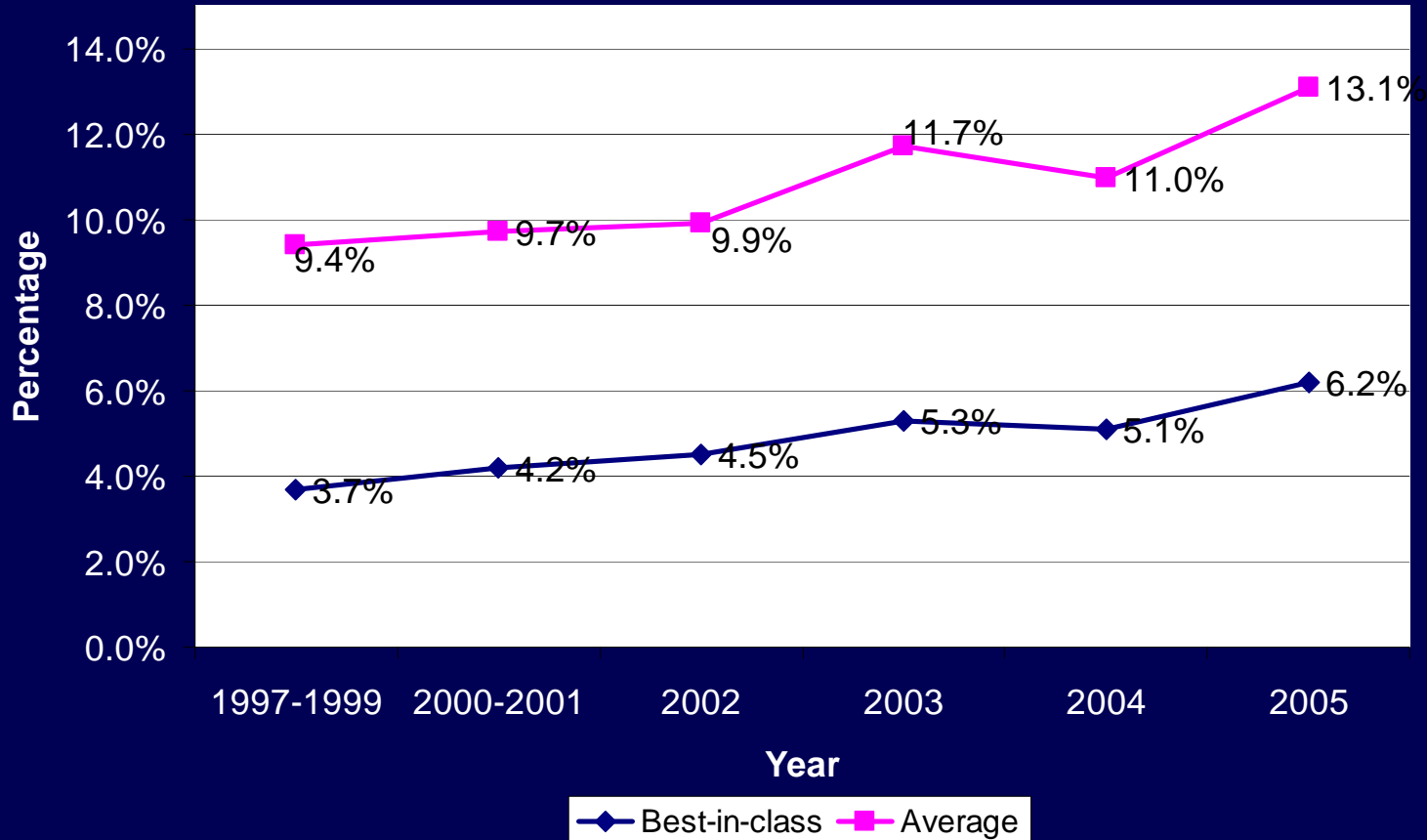
# Supply Chain Costs Are 4-15% Of Revenue



Source: The Performance Measurement Group

# U.S. Supply Chain Costs Are Rising

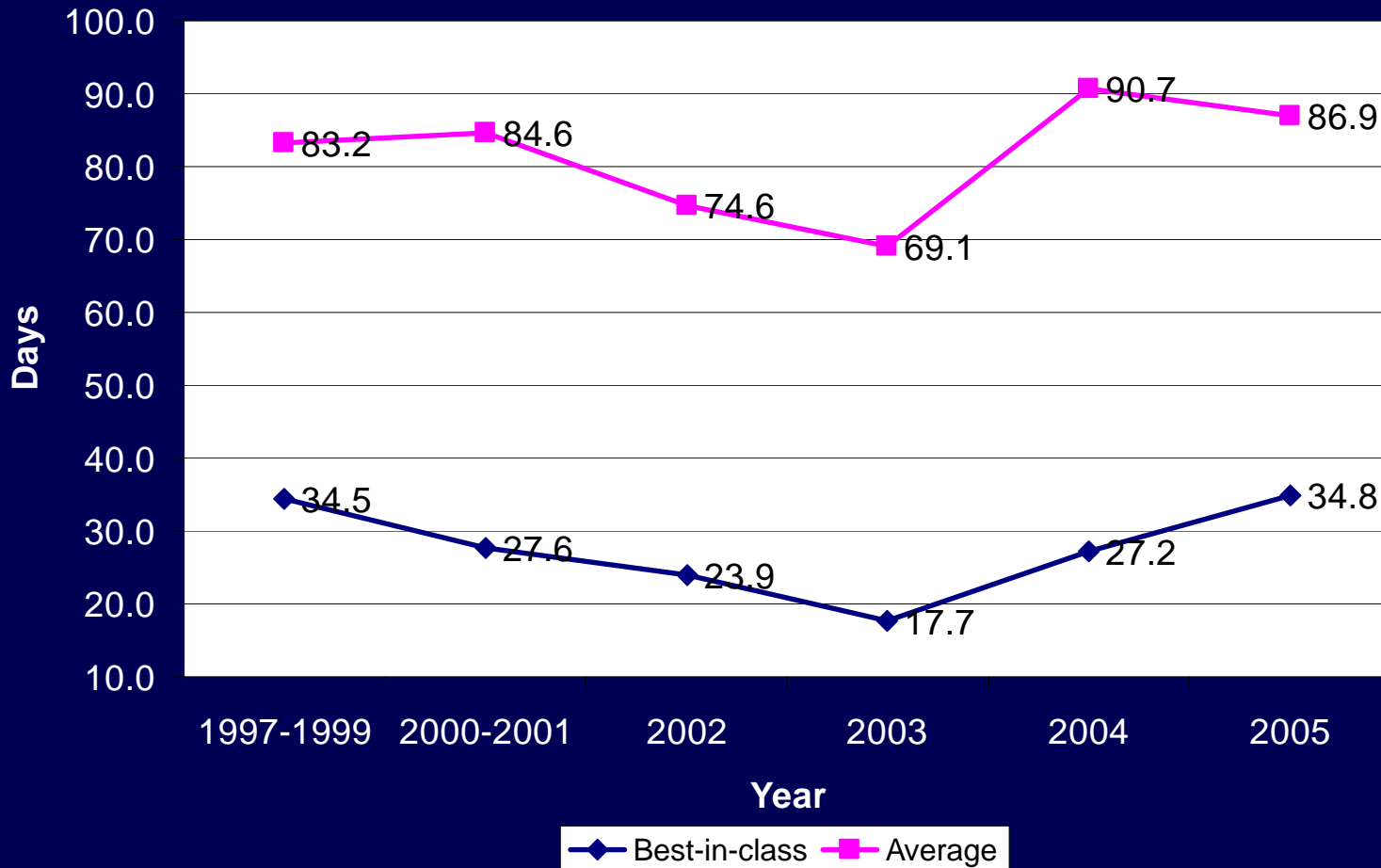
## Total Supply Chain Management Costs (% of revenue)



Source: The Performance Measurement Group

# U.S. Inventories Are Increasing Too

## Inventory Days of Supply



Source: The Performance Measurement Group





# Conclusions

# Key Take-Aways

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**Benchmarks show that supply chain performance is a key driver of overall company performance, and therefore also U.S. economic performance**

**Benchmarks indicate that congestion cost is impacting company's supply chain costs and inventory**

**Use SCOR based supply chain metrics to provide fact-based foundation for transportation policy decisions and to measure policy impacts**

# Thank you!

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# Appendix

## Introducing PRTM



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Where Innovation Operates

# Who We Are

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**PRTM is the premier operational strategy consulting firm, focusing on operational innovations that drive growth, boost profitability, and set new standards for market leadership**

# PRTM Global Experience

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- 30 years of operational strategy and innovation
  - More than 500 consultants worldwide
  - 16 offices worldwide
  - Over 1,200 clients and 6,000 projects
  - 90% level of repeat business
- Major commercial and government sectors:
    - Aerospace and Defense
    - Automotive
    - Chemicals and Process Industries
    - Communications and Media
    - Consumer Goods
    - Electronics and Computing
    - Energy
    - Financial Services
    - Government
    - Life Sciences and Healthcare
    - Industrial Products
    - Software

