YPO Global Supply Chain Survey
Management Overview

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Life is a Gift
Dream
Act
Take Risks
Anything is Possible!

YPO Global Supply Chain Survey
Management Overview

About the Survey:
It would have been rewarding to build a survey and seminar so complete and well considered that we could show each participating company exactly where they are on the single path to supply chain excellence and what they must do to continue on that path. It was a great vision and we held on to it for thirty seconds, maybe even a minute before coming back to reality. It is not that the subject of global supply chain design and management is so complex, it is that there is just an infinite number of variables, many of them in flux, and there is no single clear and easily mapped path to excellence; there is no silver bullet. But, there are any number of signposts; there are indicators. As importantly, there are others on the path willing to share what they have discovered. In this latter arena, YPO members are uniquely positioned to assist and receive assistance from what I have found to be a remarkable collection of executive students. Having been immersed in the survey for several months, having spoken to many of you and knowing you and your companies through the survey and our many exchanges, I confirmed what I have long suspected, that the path to global supply chain excellence is an open minded, on-going process of questioning; a relentless pursuit.

"The trouble with the world is that the stupid are cocksure and the intelligent full of doubt."

Bertrand Russell (1872 - 1970)
British Mathematician and Philosopher, *Autobiography*

The responses to some of the survey questions revealed interesting and actionable facts. Some revealed interesting, but in the final analysis, not terribly useful facts. Some of the responses answered questions, if we were doing it all again, we would not ask at all. It has only been through this final comprehensive analysis with almost all of the responses in and loaded into the Bear Stearns system that these judgments could be made. Hopefully, even for the questions that do not find their way into the curriculum of the seminar, reviewing and considering them was useful. When developing the survey, we intended that simply completing it would cause you and your company to look at areas you might not otherwise review closely, look at those areas more critically, or simply look at them in a new light. In any case, you have been patient and responsive and I trust the survey and seminar will be useful additions in your own on-going pursuit of excellence.

This Management Overview is sub-divided into five areas.

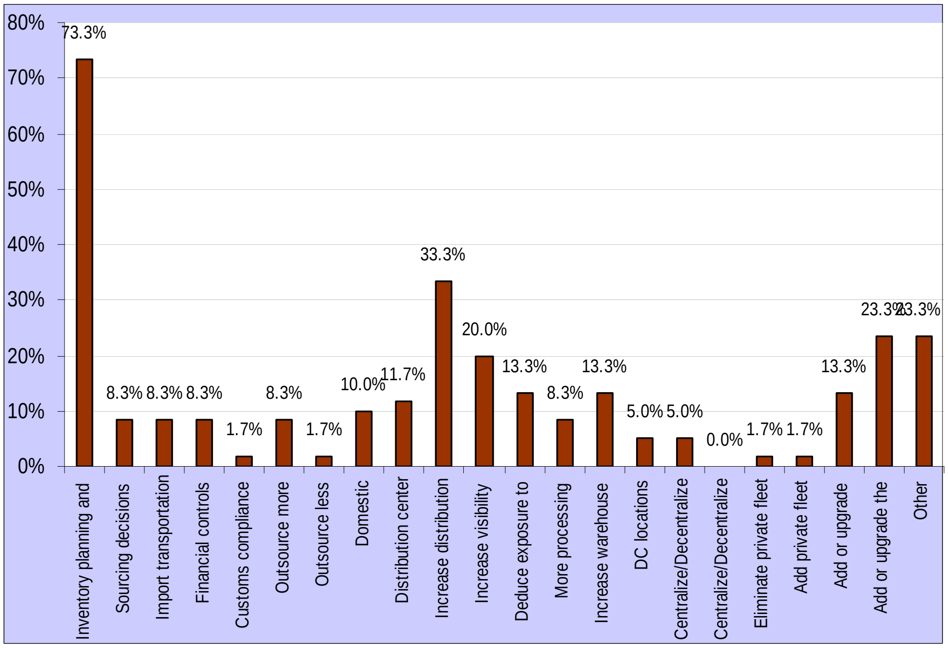
- **I) Snap-Shot**
- **II) Total Delivered Cost per Unit**
- **III) Supply Chain Cycle Time and its Impact on Cash to Cash**
- **IV) Supply Chain Visibility**
- **V) Supply Chain Continuity**
- **VI) Change**
- **VII) General**
- **VIII) Glossary**

As you might expect, the pervasive and complex nature of a global supply chain defies such a tidy structure and inevitably, issues from one area spill into others. Consequently, there is enough overlap to keep this from being quite as well structured as the outline implies.

Note: Page references listed near data, graphs, and tables are to the Index that follows the Management Overview.

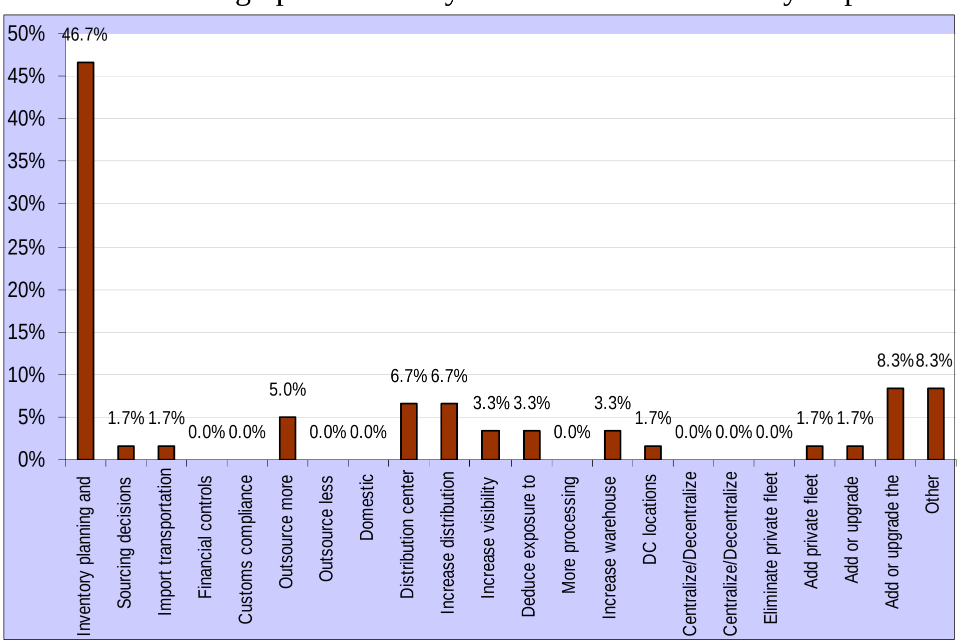
I) Snap Shot

1) If you could, what part of your company's supply chain would you change/improve immediately? (Max of 3 selections per respondent – graph data is the percent of respondents selecting each element.



Pg. 1 & 2

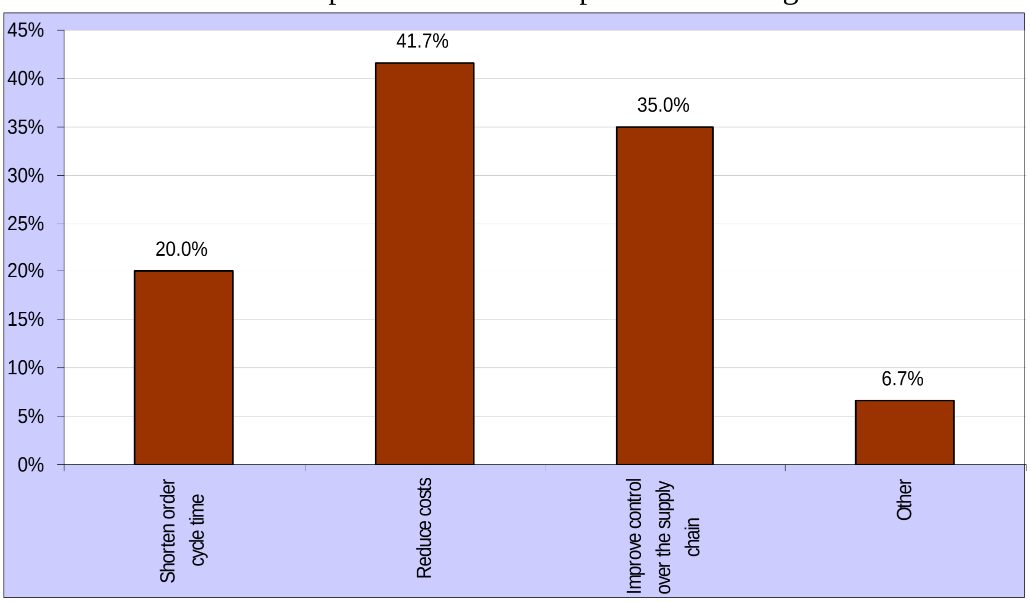
Ranked #1 – This graph shows only the #1 selections made by respondents



Pg. 2

All “Other” Comments:
Upgrade management quality in charge of supply chain
Compliance to our customer's logistics requirements
Up-grade private fleet
Direct shipment to Technician
People - lack of talent
Improve Negotiation leverage with current suppliers
Increase the size of the private fleet
Delivery logistics
Customer
Visibility of clients/suppliers inventory
Planning & Accountability in Prod. Development/Design
Eliminate middlemen in the supply chain
Planning & Accountability in production
Centralized Distribution

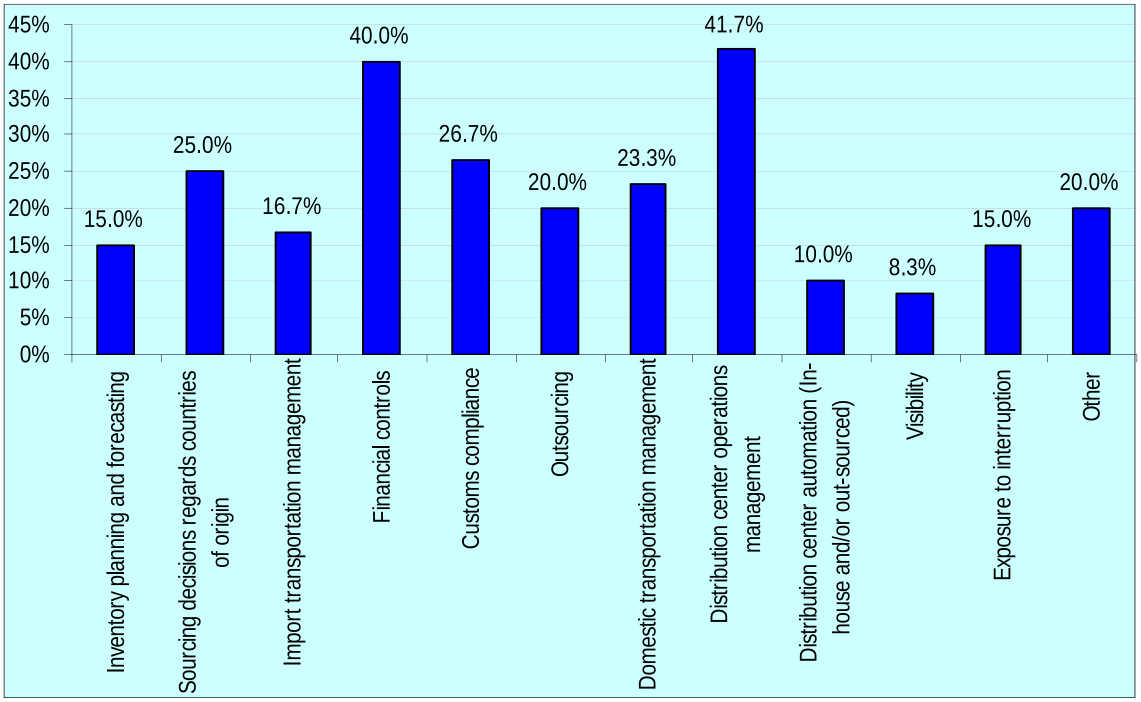
2) What would be the most important intended impact of the changes noted above?



Pg. 3

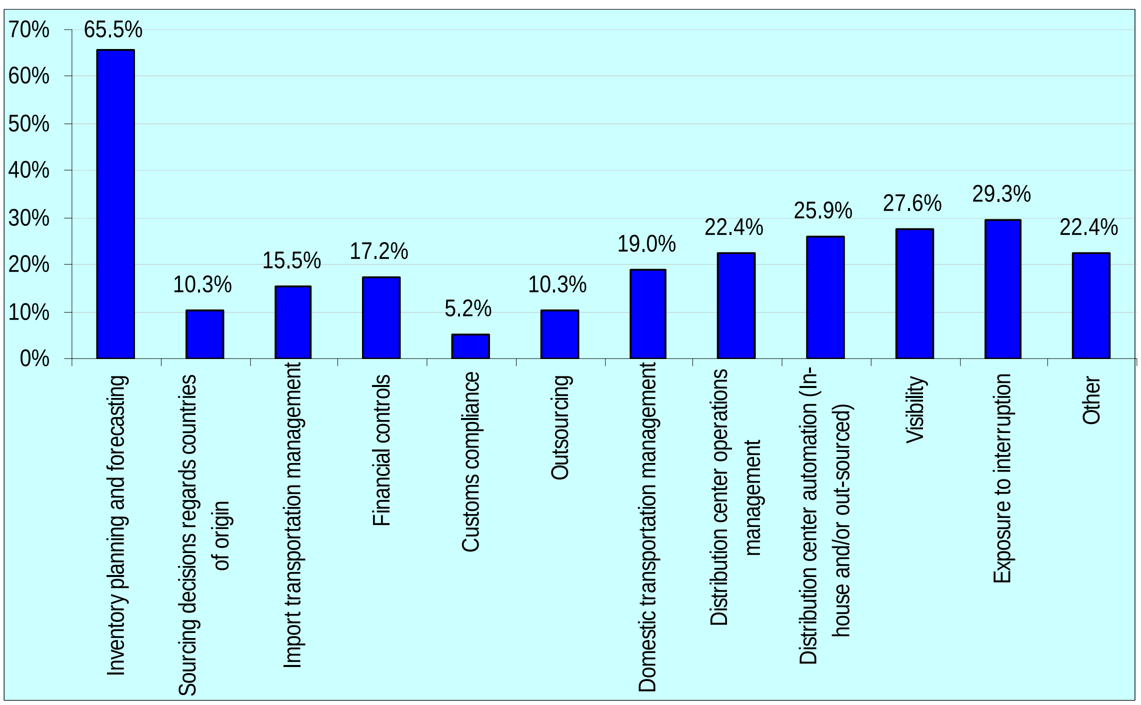
“Other” Comments:
Other was checked in several instances, but no details were provided.

3) What part of your company's supply chain do you feel is most effective? (Note different scales on X axis)



Pg. 4

4) What part of your company's supply chain do you feel is least effective?



Pg. 5

II) Total Delivered Cost per Unit

1) 62 members participated in this survey representing 66 companies. Sales for the combined companies that provided sales data is as follows (In billions):

2003 - $13.044
2004 - $14.614
2005 - $16.958

2) 2005 median sales per company was $92.6M

3) The combined sales growth from 2003 to 2005 was 30.00%

4) If the companies that did not provide sales data had the same average sales as those reporting, then the group represents $19.545B in 2005 sales.

5) While there are 66 companies represented, because of their multiple business types, there are actually:

26 Retailers
30 Wholesales
32 Manufacturers
8 Service Companies
96 Businesses

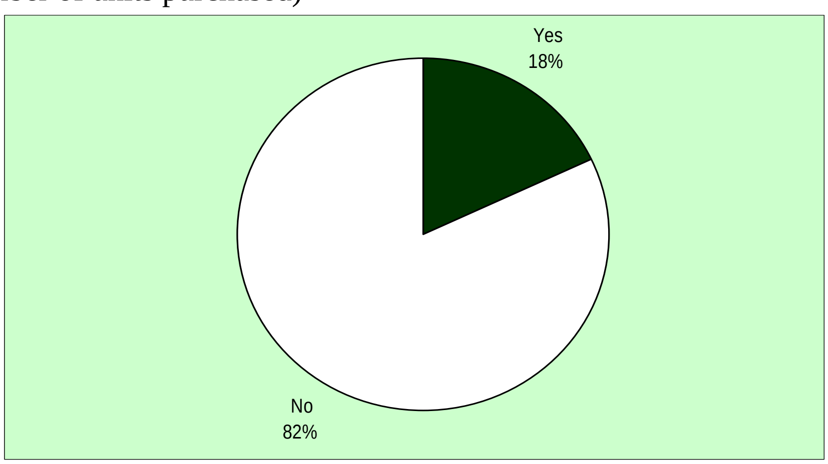
6) In 2005, the combined companies spent the following in logistics (In Millions):

$164.5	In-Bound Domestic Transportation
100.5	In-Bound Import Transportation
265.0	In-Bound Total
250.6	Out-Bound Domestic Transportation
32.3	Out-Bound Export Transportation
282.9	Out-Bound Total
548.0	Transportation – Total
185.7	Distribution Center – Labor
57.1	Distribution Center – Facility Costs
41.2	Distribution Center – General Expense
25.9	Distribution Center – Third Party Expense
309.9	Distribution Center – Total
$857.9	Logistics – Total

7) This total logistics cost and the sales number for 2005 above can not be used to calculate the overall logistics percent to sales. The sales total has service companies that have no logistics costs and some of the participating companies elected not to provide either sales and/or logistics cost data. There were 51 non-service companies that provided what appear to be full sales and logistics cost data. Their cumulative costs as a percent to their cumulative sales are as follows:

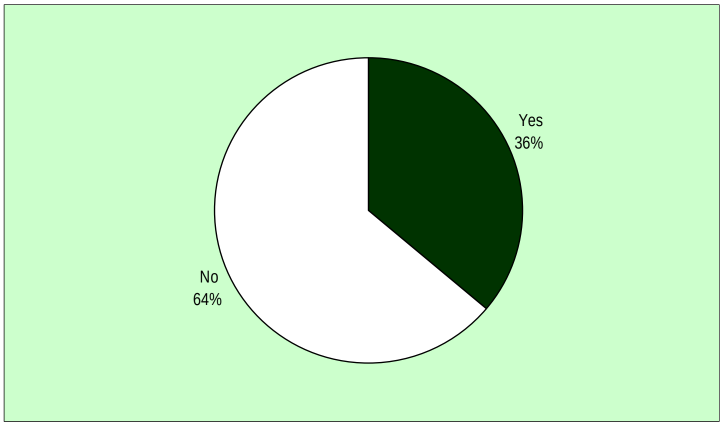
.99%	In-Bound Domestic Transportation
.62%	In-Bound Import Transportation
1.60%	In-Bound Total
1.48%	Out-Bound Domestic Transportation
.19%	Out-Bound Export Transportation
1.67%	Out-Bound Total
3.33%	Transportation – Total
1.11%	Distribution Center – Labor
.34%	Distribution Center – Facility Costs
.24%	Distribution Center – General Expense
.17%	Distribution Center – Third Party Expense
1.86%	Distribution Center – Total
5.17%	Logistics – Total

8) Do you currently calculate and publish total delivered cost per unit? (For a defined period of time, the total of all acquisition, transportation, and distribution costs divided by the total number of units purchased)



Pg. 6

9) Do you currently calculate and publish DPP (Direct product profitability) for individual items within the total product offering?



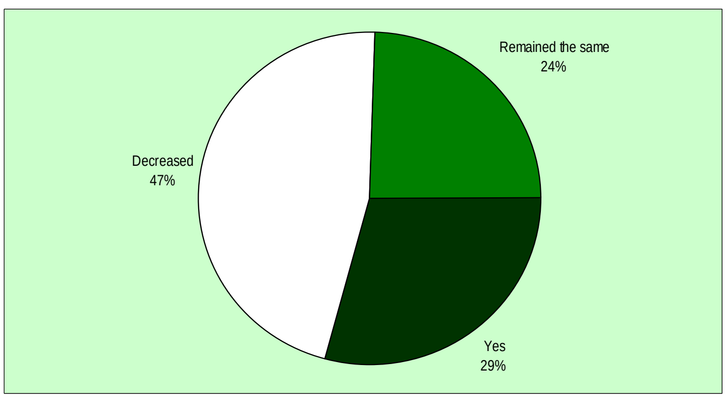
Pg. 7

10) How long has your data tracking system been in place?

Not applicable	35.0%
< 6 months	5.0%
6 mos. to 1 yr.	5.0%
1 yr. to 2 yrs.	6.7%
> 2 yrs.	48.3%

Pg. 8

11) As a result of tracking either total delivered cost per unit or direct product profitability, has your company's supply chain costs increased, decreased, or remained the same?



Pg. 9

12) Do you currently calculate and publish information on the profitability of classifications of merchandise within the total product offering? (Pg. 10)
Yes – 59
No 41%

13) For those that do not have DPP or total delivered cost per unit reporting capability, 72% of respondents plan to implement such a program. Of these, 70% will be installing a program within 12 months. The other 12 or 30% say they will be doing so beyond 12 months from now. (Pgs. 11 & 12)

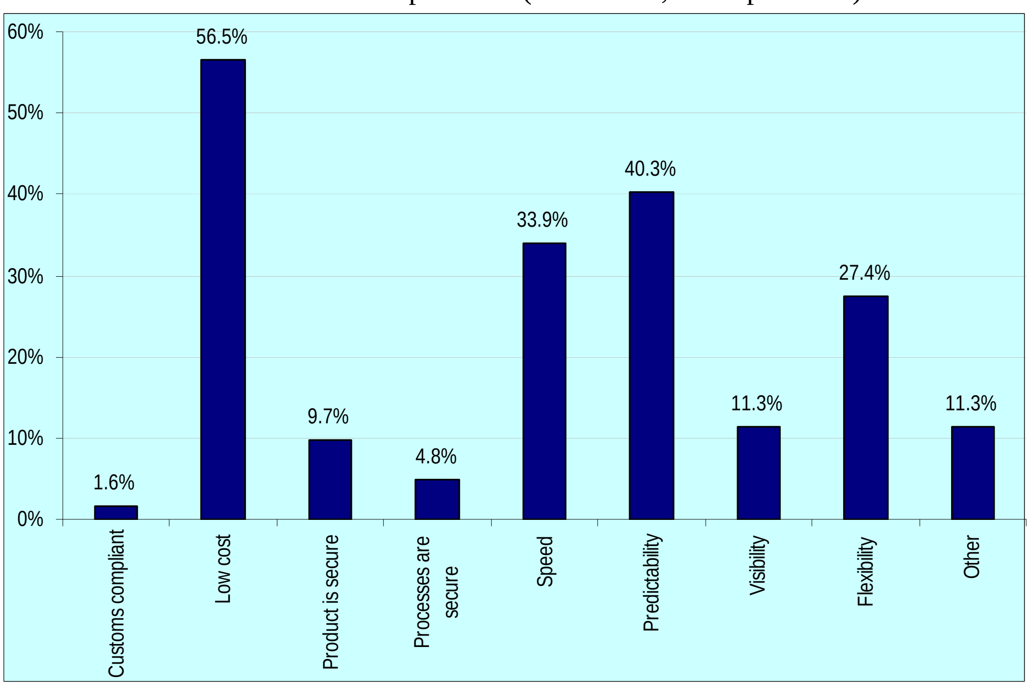
14) Instead of total delivered cost per unit or direct product profitability, does your company simply calculate transportation and distribution costs as a percent to sales? (Pg. 13) Yes – 64%, No – 36%

15) What are the two most important attributes of a successful supply chain? Each respondent had two votes and were offered the following nine options:

1) Customs compliant
2) Low cost
3) Product is secure
4) Processes are secure
5) Speed
6) Predictability
7) Visibility
8) Flexibility
9) Other.

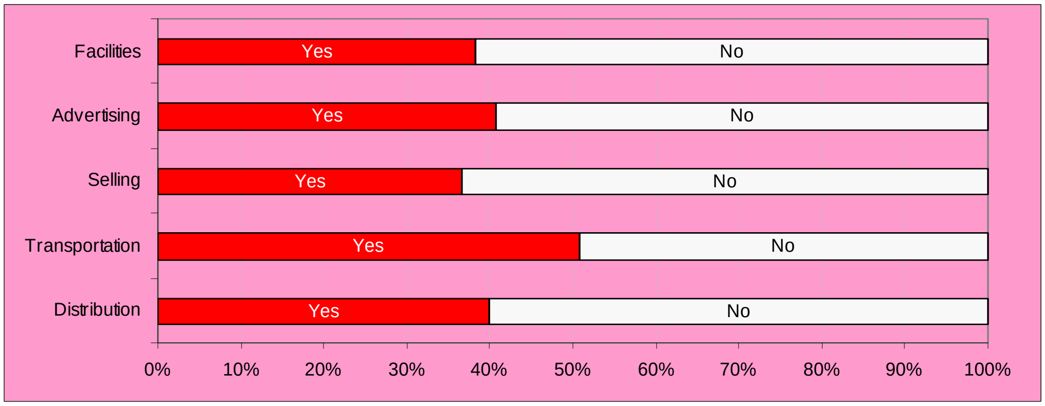
9) Other – write-ins included:
Customer satisfaction (2)
Consistency / Reliability
Performance
Cash Flow
Quality
Accuracy

Percent of Total Respondents (120 entries, 61 respondents)

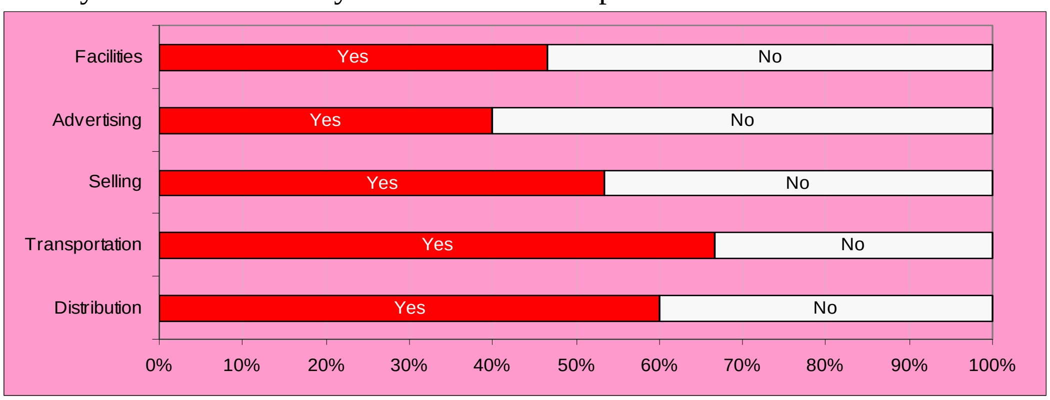


Pg. 14

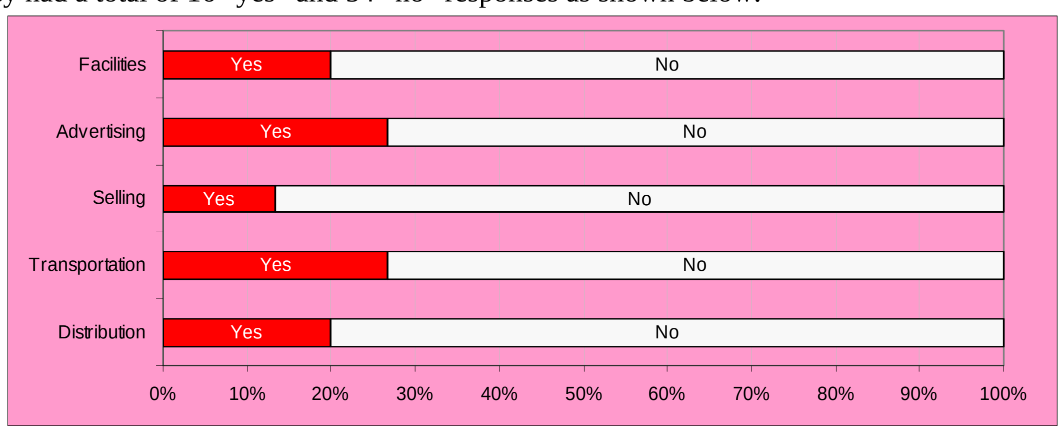
16) We asked a series of questions concerning whether or not various types of expenses are assigned to specific items or categories of items. The expense types include distribution, transportation, selling, advertising and facilities. There were 120 "yes" and 175 "no" responses over the five categories as shown below. (Pg. 15)



We then selected the top 25% of companies with the highest sales increase from 2003 to 2005. They had a total of 41 "yes" and 34 "no" responses as shown below.



We then selected the bottom 25% of companies with the lowest sales increase from 2003 to 2005. They had a total of 16 "yes" and 54 "no" responses as shown below.



Does the act of allocating expenses drive sales? Is the allocating of expenses something fast-growing companies just do? We look forward to the discussions that will shed some light on this particular analysis.

17) What percentage of in-bound transportation is prepaid by the supplier vs. shipping to your company freight collect? (Pg. 16)

Mean 48.8%

Median 45.0%

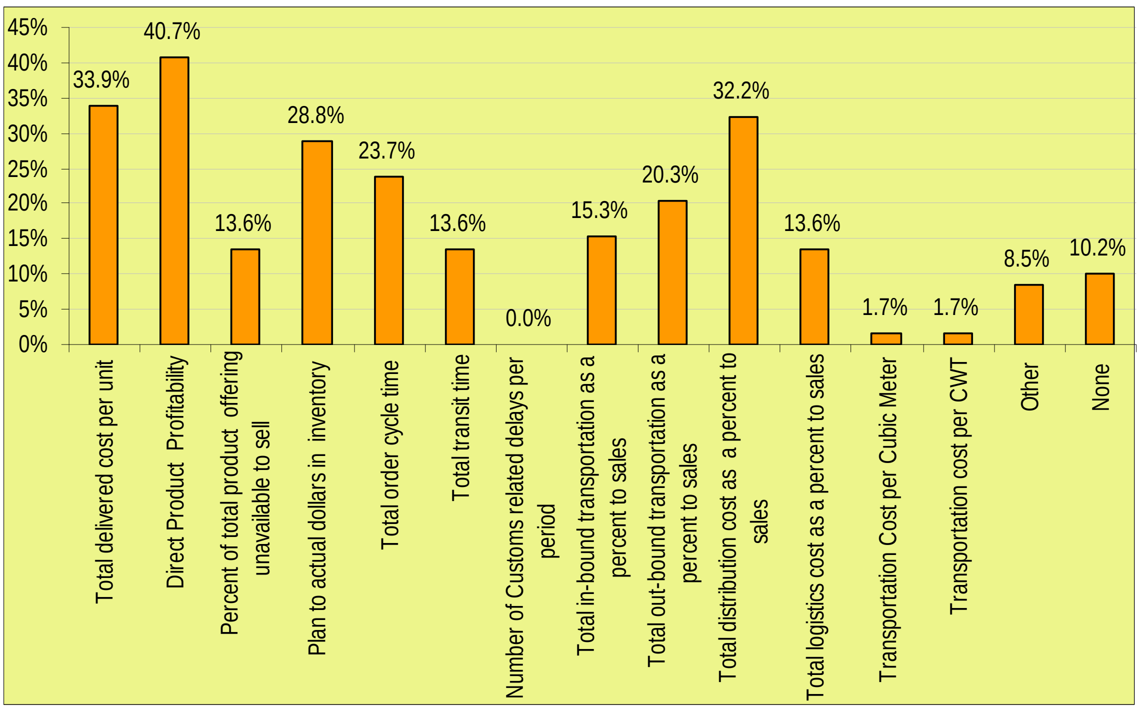
18) What percentage of out-bound transportation do you prepay to your customers vs. shipping collect? (Pg. 16)

Mean 55.5%

Median 68.5%

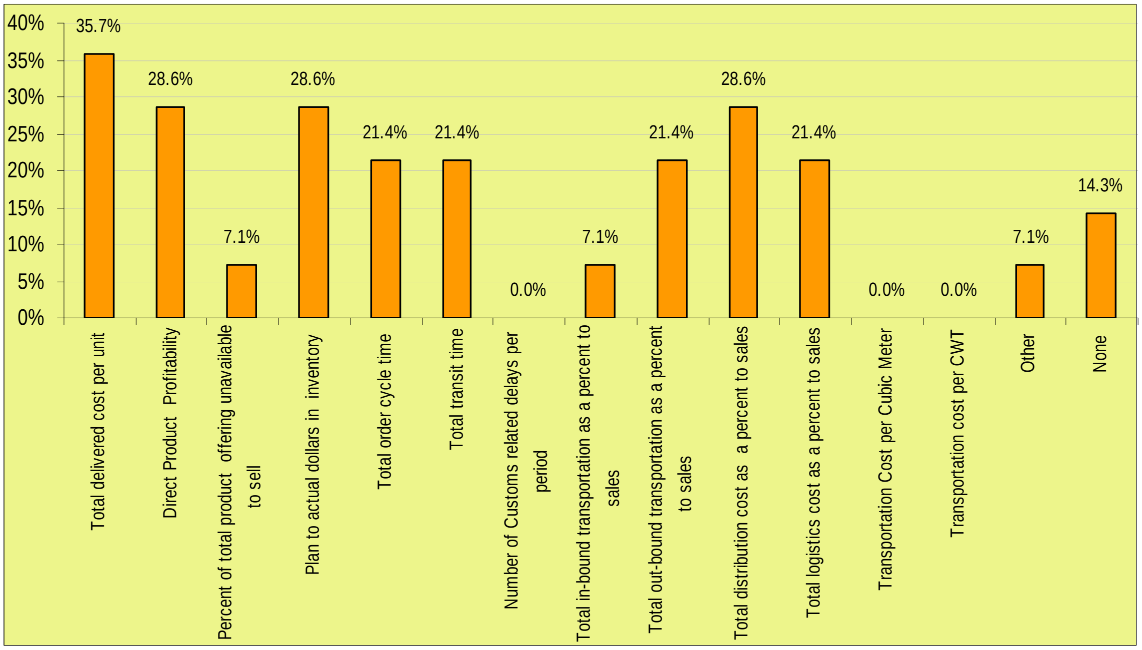
19) What are the top three Key Performance Indicators (KPIs) your company uses to measure supply chain performance?

All respondents



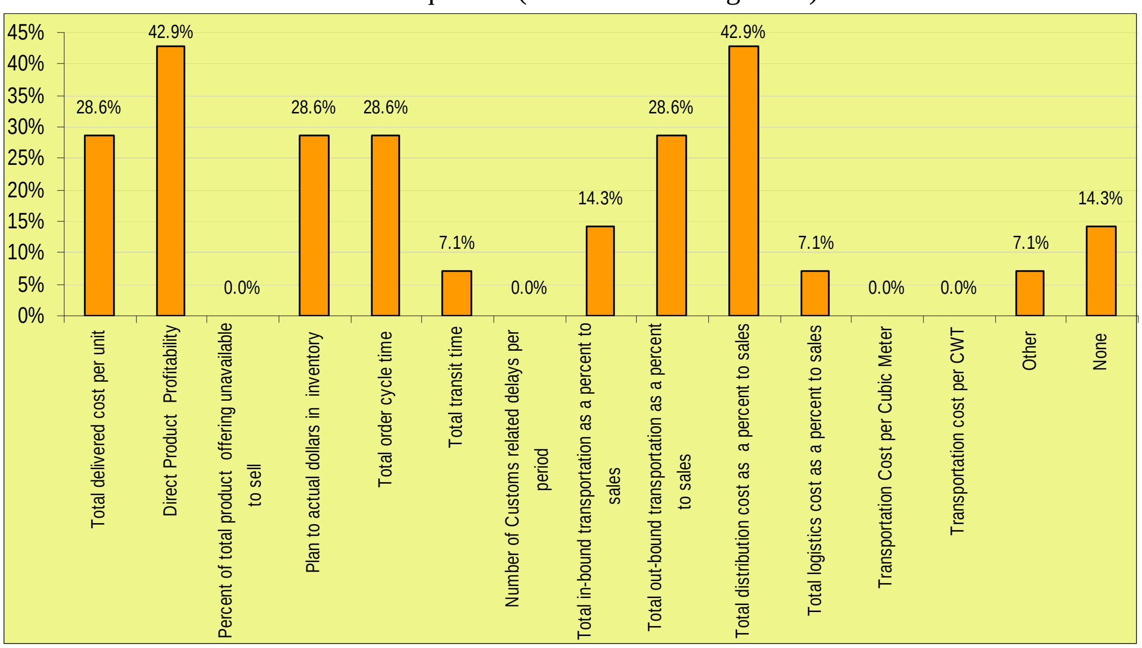
Pg. 17

Top 25th percentile (2003-2005 sales growth)



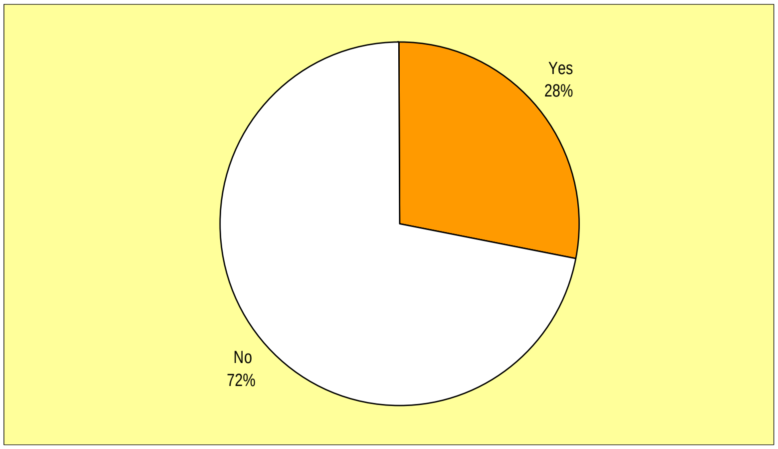
Pg. 18

Bottom quartile (2003-2005 sales growth)



Pg. 18

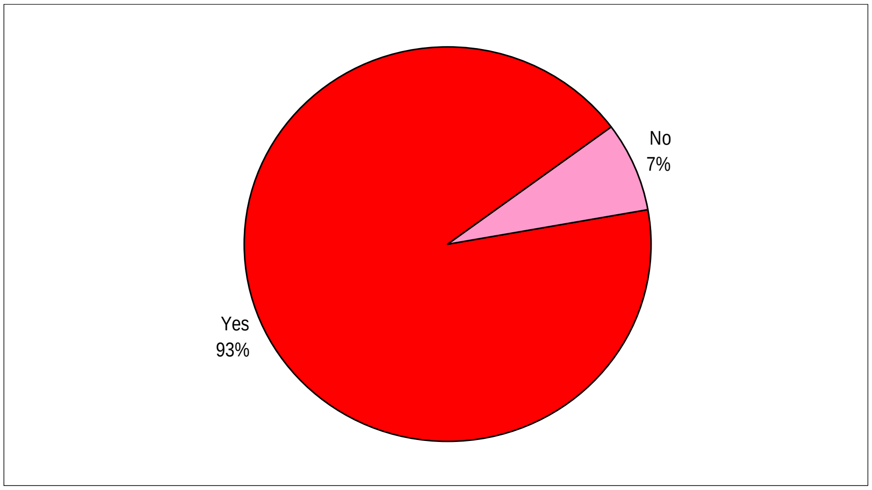
20) Are your planning tools precise enough to compare various cost prices across various sources and various supply chain cost options?



Pg. 19

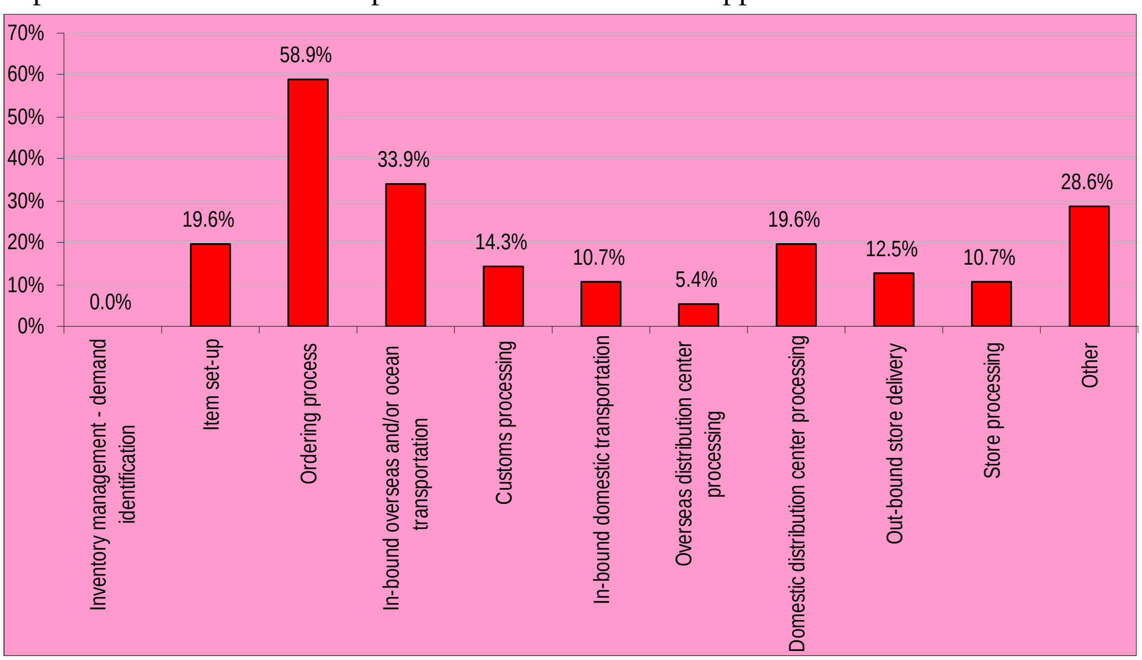
III) Supply Chain Cycle Time and its Impact on Cash to Cash

1) Do you perceive a need to increase the speed of material through your company's supply chain?



Pg. 20

2) The need for speed was almost unanimous, but where time can be taken out of the supply chain cycle was not. We asked, “Within your supply chain, what are the top three (3) areas where your company is most likely to be able to reduce order cycle time?” We allowed three selections per respondent, but got only 118 entries from 55 respondents. It seems that respondents know where the opportunities are.



Pg. 21

“Other” included the following areas where participants feel they can take time out of their supply chain:

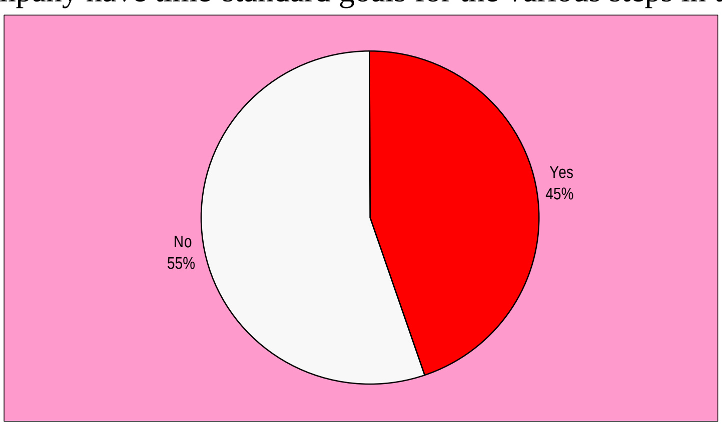
> **a) Vendor Related -** Direct contact w/ factories / Manufacturers in China; Supplier Manufacturing Time; At the vendor; Lead-time given to vendors; Shorter lead times from our suppliers of raw material; Get our factories to have our orders jump ahead of other customer's orders
>
> **b) Transportation Related -** Closer relationship w/ Intl. Frt. Forwarder in HK; Pier to warehouse priority
>
> **c) Regulatory -** Legal issues in my own country, making paper processing of imports difficult and time and money consuming
>
> **d) Internal -** Improved import organization & process flow; Internal processes; Product development - CTL appropriate; Product development; Purchase decision being more on design than price; Prod. Planning & Accurate Scheduling

There appears to be no time to be saved from the inventory management – demand identification elements of the supply chain, but there are opportunities in Item Set-Up and the Ordering Process. These are the main internal opportunities (along with the “Other - Internal” category) as the bulk of the other responses deal with the physical processing and transportation. There are no details that describe the specific issues relative to Item Set-Up and the Ordering Process.

3) What is your company's current domestic and international reorder cycle time in days? As you might expect, given the broad cross-section of company types and the global placement of participating companies, the data is highly skewed.

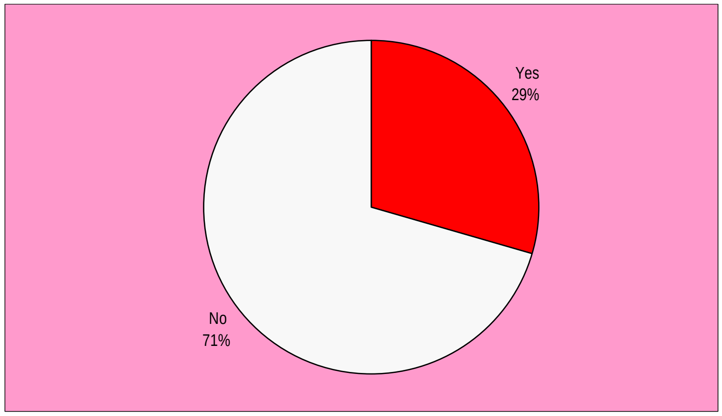
> Domestic Reorder Cycle Time: Ranges from 1 day to 71 days. The mean is 11.8 days and the median is 7.0 days.
>
> International Reorder Cycle Time: Ranges from 1 day to 130 days. The mean is 57.3 days and the median is 52 days.

4) Does your company have time-standard goals for the various steps in the supply chain?



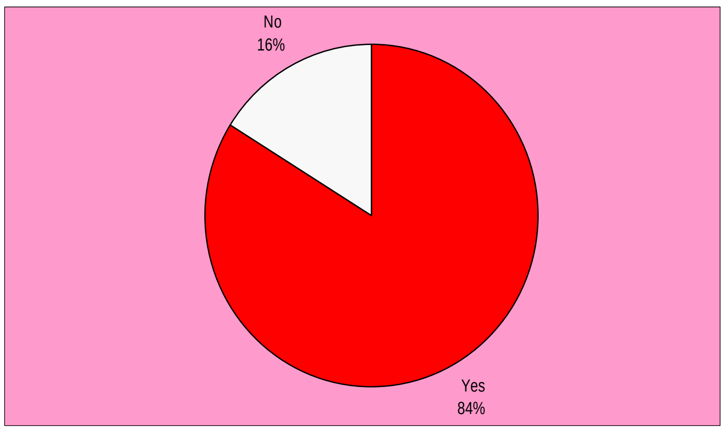
Pg. 22

5) Does your company track and report supply chain cycle time?



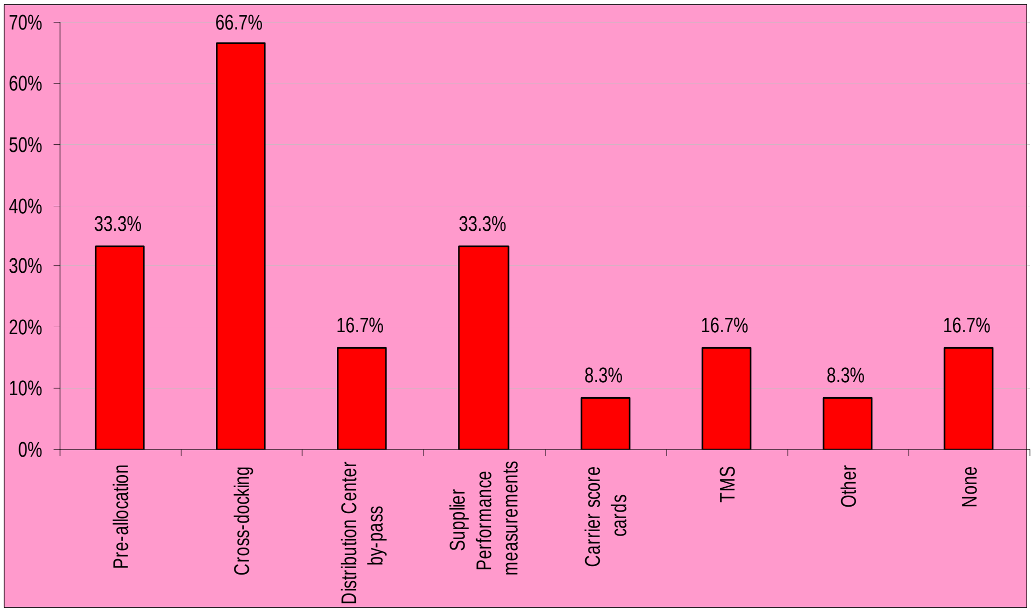
Pg. 23

6) ‘That which cannot be measured, cannot be managed.’ Do you believe this is true?

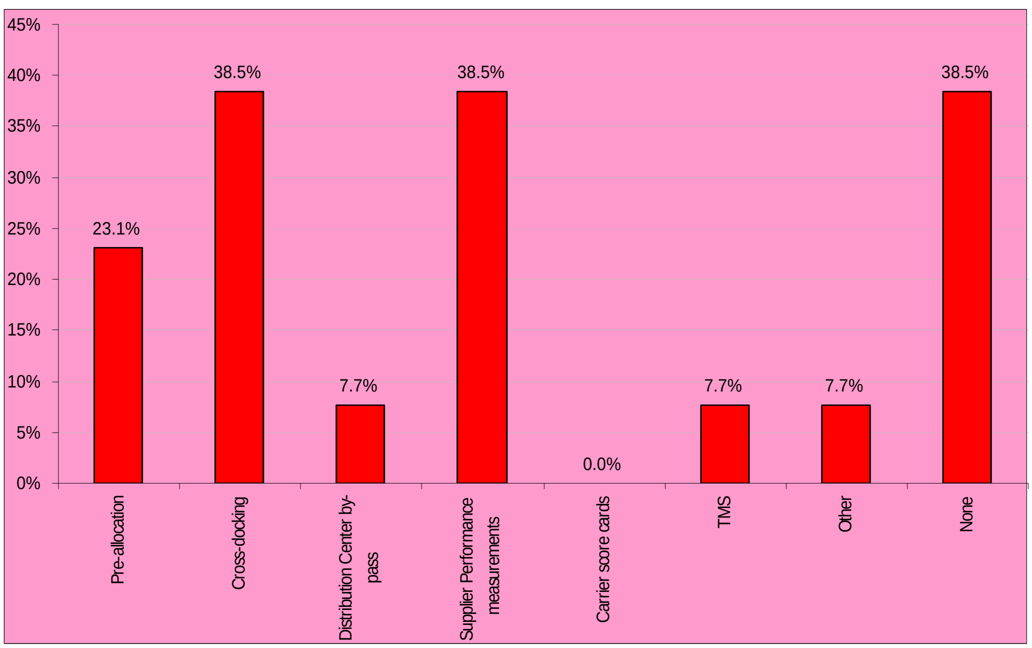


Pg. 24

7) Does your company use any of the following? The graphs below detail the responses of the top quartile of companies measured by their sales increase from 2003 to 2005 and the bottom quartile. This is not necessarily the best litmus test for measuring overall success, but seems a reasonable measure in the absence of other more precision criteria.



Pg. 25 Top 25th percentile (2003-2005 sales growth)



Pg. 25 Bottom quartile (2003-2005 sales growth)

This is admittedly a tenuous analysis and one that must be taken with some reservation. Sales increases in companies in the top quartile could have been inflated by acquisitions or in the case of retailers, an increase in the number of stores and may or may not reflect the results of best practices and brilliant management. With that said, the major differences between to the two groups are:

a) The higher level of Pre-Allocation, Cross-Docking and DC By-Pass in the Top quartile companies

b) The higher level of "None" responses in the bottom quartile companies

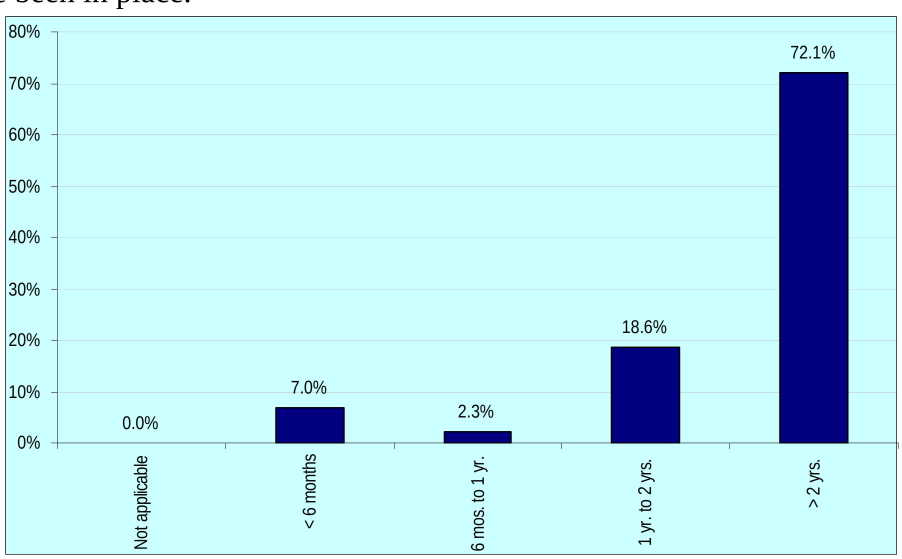
8) What sales and inventory forecasting system(s) does your company use? (List all currently in use)

The respondents listed 69 inventory planning and forecasting tools. Of the 69, 33 are systems that are/were available from various software houses such as SAP, i2, E3, etc. The one that occurs most often is JDA, but it is listed only 3 times. All to say, there is a great deal of variety in the "off-the-shelf" systems.

Of the 69 systems, there were 11 systems that respondents indicated were developed in-house and there were 15 systems that are not so much systems and methods. These include min/max, customer forecasts, historical sales, etc.

The single most frequently listed inventory planning and forecasting tool was the ubiquitous Excel Spreadsheet. Excel was listed 10 times. You should know; Excel is in use in only 1 of the companies in the bottom quartile of 2003 to 2005 sales increases; it is in use in 3 of those in the top quartile. (Before abandoning your exotic systems, also know that Excel was not the only system claimed by the top or bottom quartile companies.)

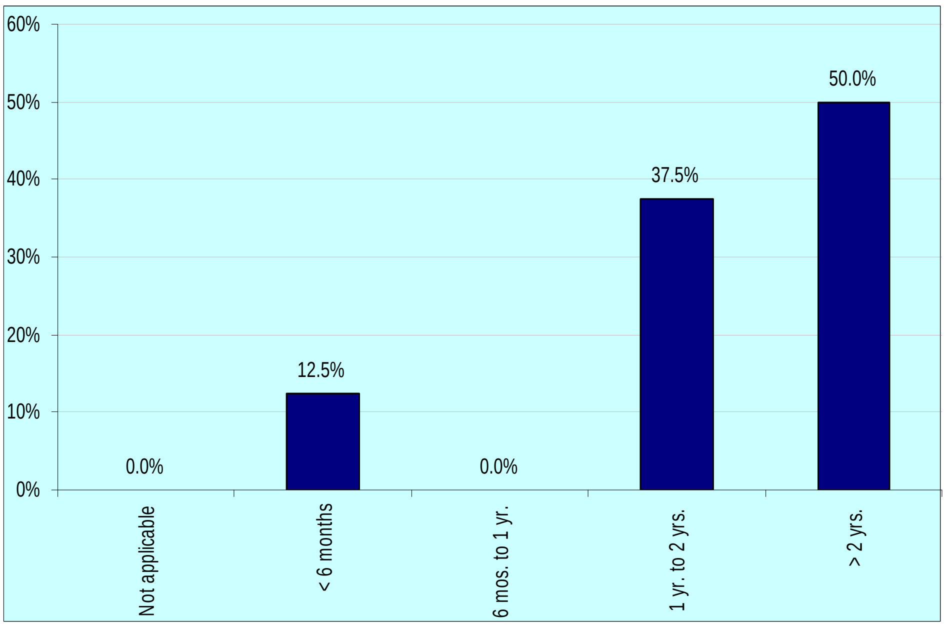
9) If your company uses sales and inventory forecasting systems, how long ago was the first system implemented? The graph below shows how long the planning and forecasting tools have been in place.



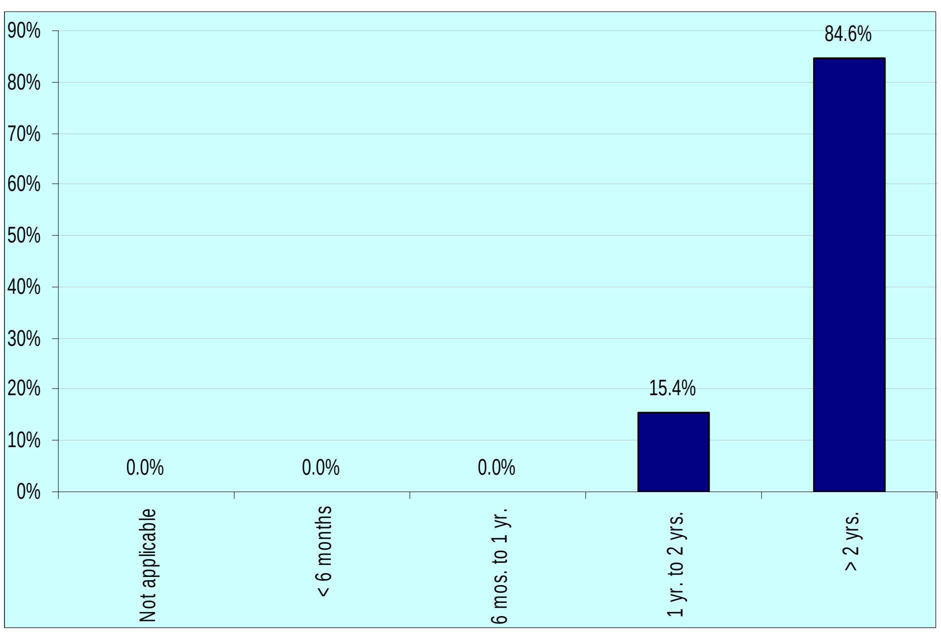
Pg. 26

In the original responses, there were a total of 53 respondents answering this question, but 11 checked Not Applicable. I looked at their business models and can see how they might not need tools of this nature. Consequently, I took them out of the totals. The graph above and those that follow address only those companies that have inventory planning and forecasting tools and by implication, need them.

10) As you can see, 7.0% of the systems came on line within the last six months. 72.1% are over 2 years old. We then looked at the age of systems in the top and bottom quartiles of 2003 to 3005 sales increases.

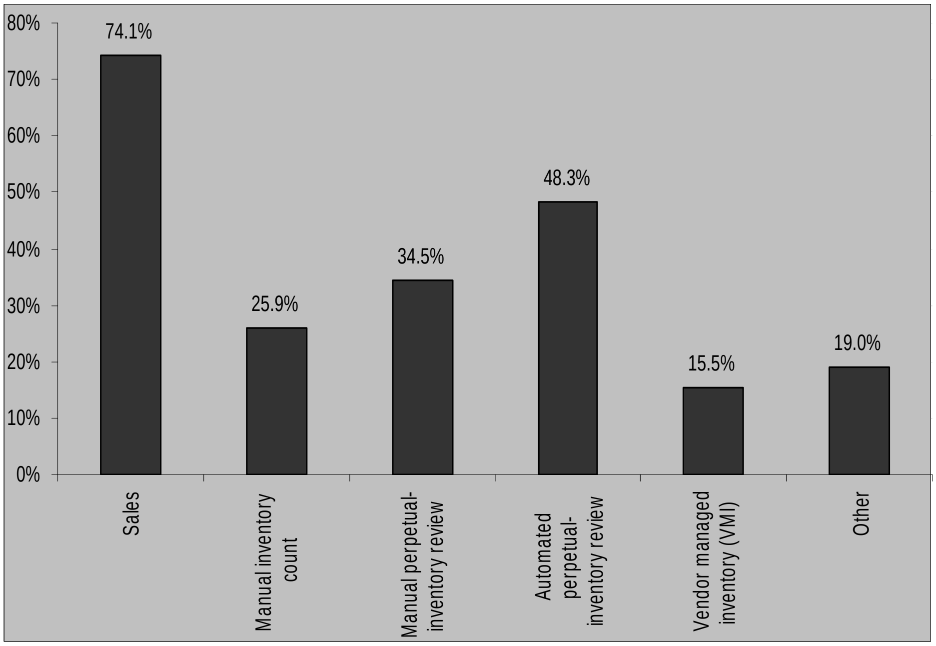


Pg. 27 Top 25th percentile (2003-2005 sales growth)



Pg. 27 Bottom quartile (2003-2005 sales growth)

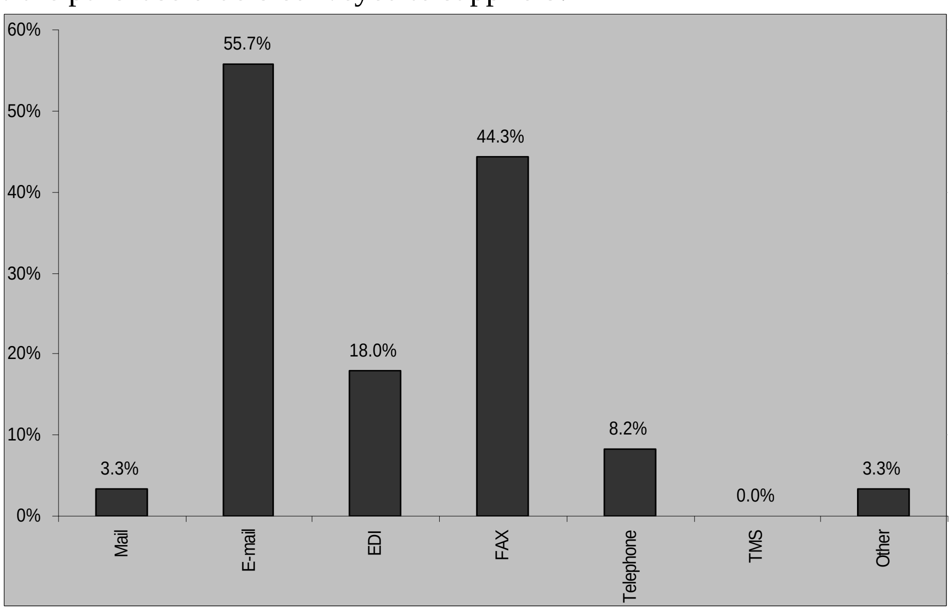
11) What triggers the decision to purchase an item? 57 respondents, 125 responses



Pg. 28

12) Are your suppliers included in the forecasting process? (Pg. 29)
Yes – 37%
No – 63%

13) How are purchase orders conveyed to suppliers?

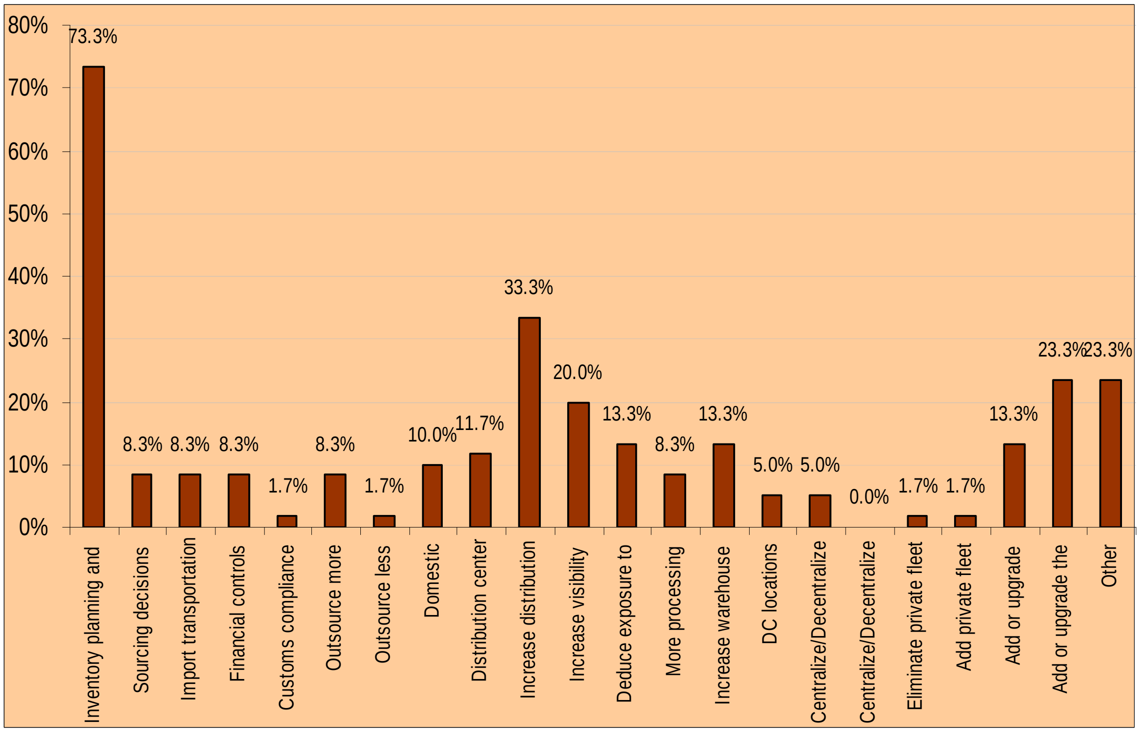


Pg. 30

14) Is your company linked electronically to your trading partners? (Pg. 31)
Yes – 45%
No – 55%

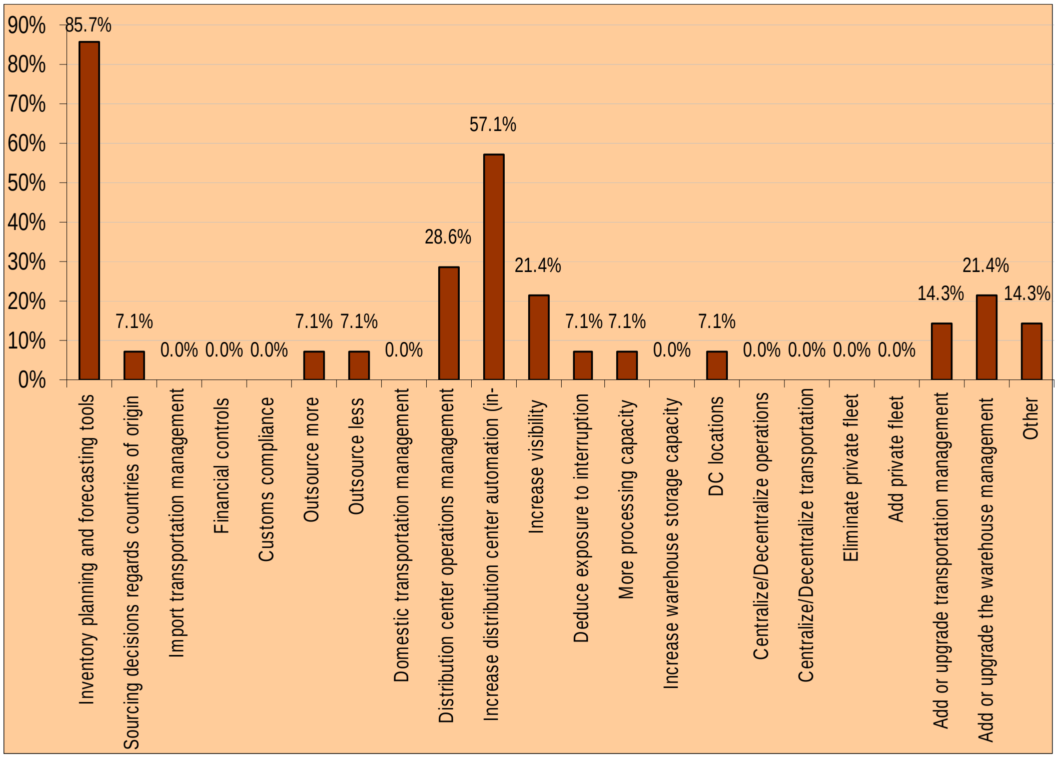
15) Is your company involved with Vendor Managed Inventory (VMI)? (Pg. 32)
Yes – 28%
No – 72%

16) If you could, what part of your company's supply chain would you change/improve immediately?



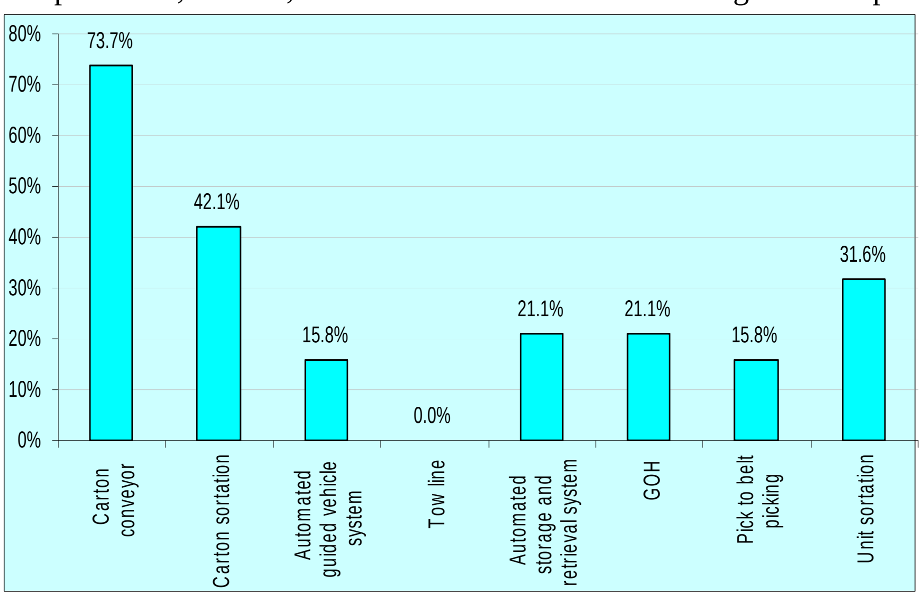
Pgs. 1 & 2

17) As shown on the graph below, we looked at the top quartile companies on this issue as well and found that 85.7% would change or improve their inventory planning and forecasting tools immediately if they could. (Note the different X axis on the graphs)



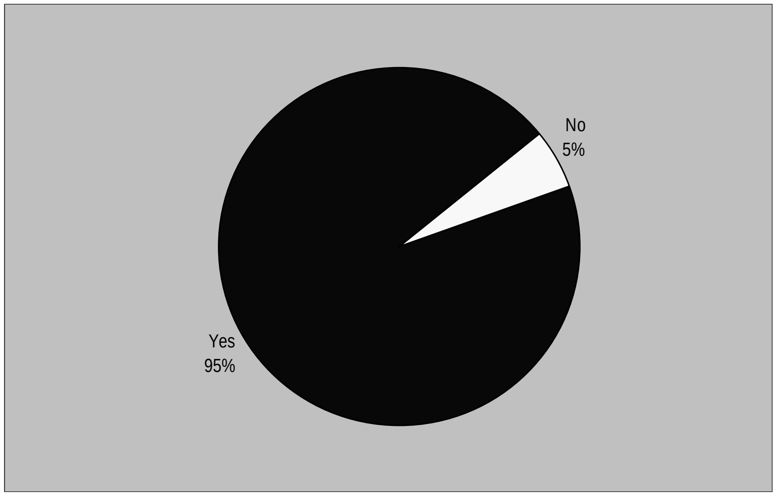
Pg. 33

18) What type of automated materials handling equipment does your company have in your owned or out-sourced domestic distribution center operation(s)? Only 16 of the companies represented, or 25%, have automated materials handling in their operations.



Pg. 34

19) If your company has implemented automated materials handling solutions in your owned or out-sourced domestic distribution center operation(s), did it meet expectations?

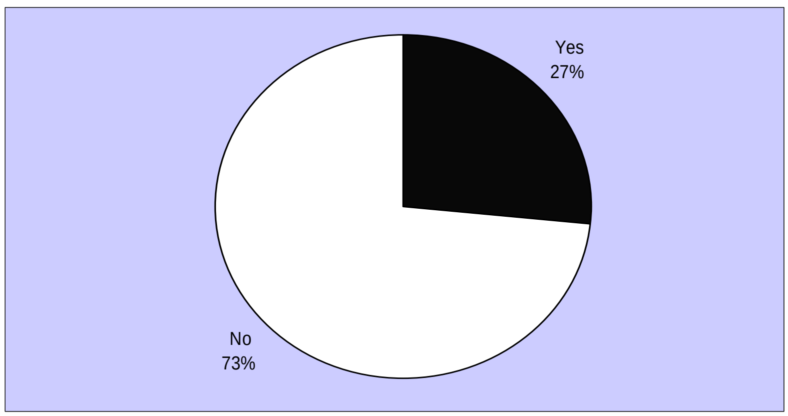


Pg. 35

IV) Supply Chain Visibility

1) As part of the survey we asked respondents to define, “Supply Chain Visibility.” While there was great variety in the responses, they all came close enough to convince us that we are generally in sync when referring to supply chain visibility. (Respondent responses are provided on page 99 of the index. Note: There are three pages numbered 99)

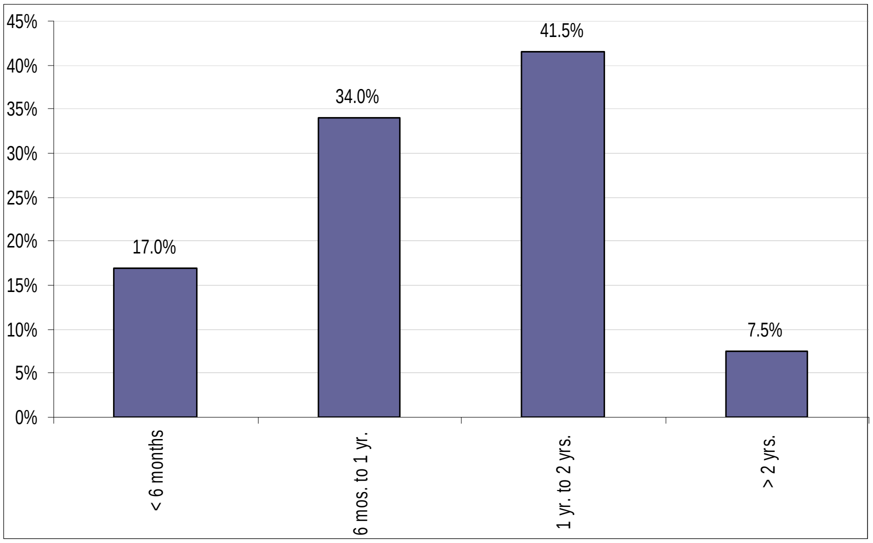
Supply chain visibility is sometimes defined as being able to answer the question, "Where is the order?" at once, in real time, across multiple trading partners and multiple service providers. It is having proactive real-time tools that alert you and/or others with a need to know, when events are not going as you planned, early enough that you can actually do something to correct the situation. Does your company have this level of supply chain visibility?



Pg. 36

2) We then asked, in five successive questions, Would greater supply chain visibility improve the performance of your company's suppliers; improve the disciplines associated with procurement within your company; reduce supply chain costs in your company; reduce the amount of time those in procurement in your company spend on order follow-up; and improve the disciplines associated with transportation and distribution within your company? **The frequency with which the 60 respondents answered yes to the questions above was 92%, 98%, 98%, 98% and 95% respectively.** (Pgs. 37, 38, 39, 40 & 41)

3) If your company is considering systems to improve supply chain visibility, when would they likely be implemented?



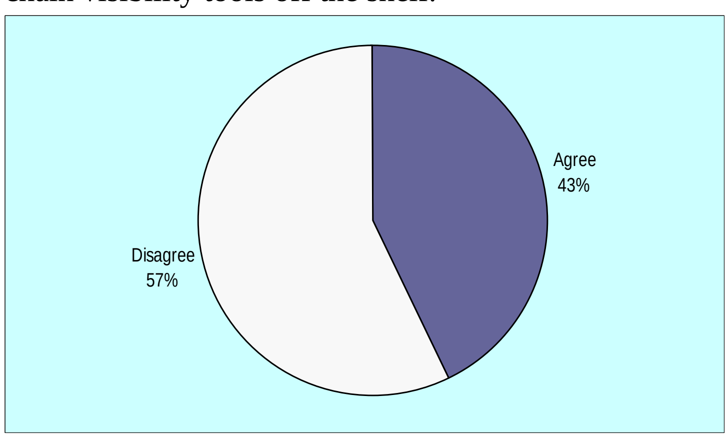
Pg. 42

4) We correlated the question at the beginning of the visibility section (the question that defined supply chain visibility and asked if respondent's companies have that level of visibility) with each participating company's total logistics cost as a percent to sales.

Respondents that answered "Yes" (27% did), their 2005 total-logistics cost as a percent of sales was 5.6%

Respondents that answered "No" (73% did), their 2005 total-logistics cost as a percent of sales was 6.4%

5) We asked respondents to agree or disagree with the statement, a company can purchase supply chain visibility tools off the shelf.



Pg. 43

6) The following is not part of the YPO GSC Survey, but possibly of interest to attendees.

From *Visibility to Action - 2004* by Jeff Abbott, Karl Manrodt, and Peter Moore

"One area that visibility should impact the supply chain the most revolve around inventory management. As domestic visibility increases there is less of a need for inventory to cover uncertainty in the process. Specifically, inventory turns, DSI (Days of Sales in Inventory) and DSO (Days of Sales Outstanding) should be lower for those firms reporting higher levels of supply chain visibility. Statistically significant findings were found in these three areas. This provides tangible proof that visibility can - and has - impacted supply chain performance."

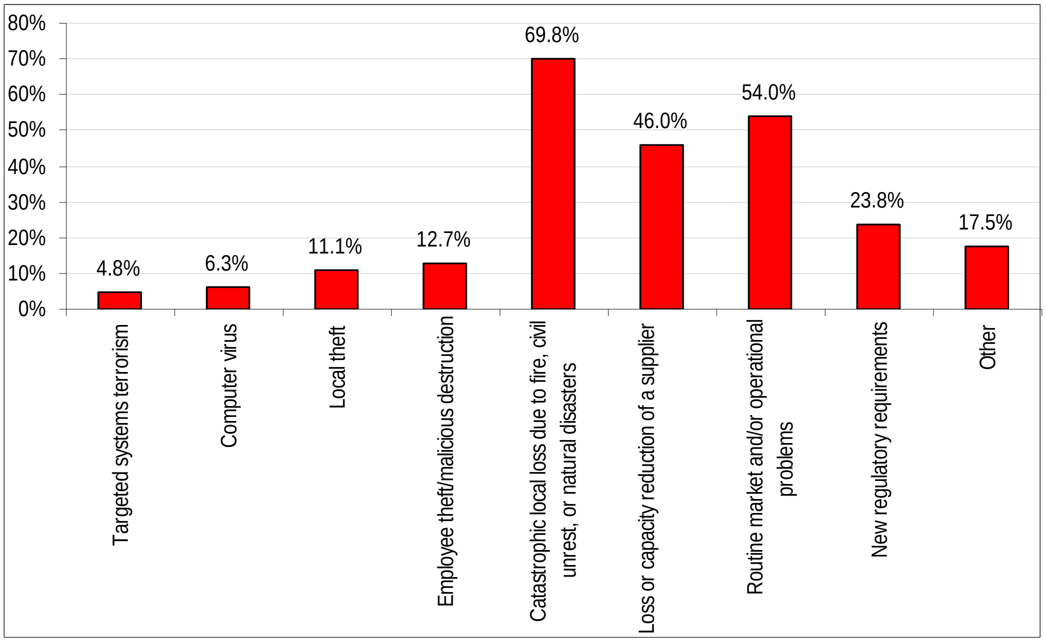
Benefits of Greater Domestic Visibility:

Factor	High Visibility Firms	Low Visibility Firms
Number of turns (finished goods only)	14.6	9.8
Days sales in inventory (finished goods only)	22.1	38.2
Average days sales outstanding (accounts receivable)	26.1	39.4

"Summary - Firms reporting a high level of domestic supply chain visibility experienced better inventory performance than those that reported lower levels of visibility. It is a well known axiom that we use inventory when there is uncertainty in the process. Certainty comes from a verifiable sensing that the supply chain is in good order and performing to the metrics promised."

V) Supply Chain Continuity

1) What area represents the highest element of risk to your supply chain? (We asked for the top three.) There were 62 respondents providing a total of 158 responses.

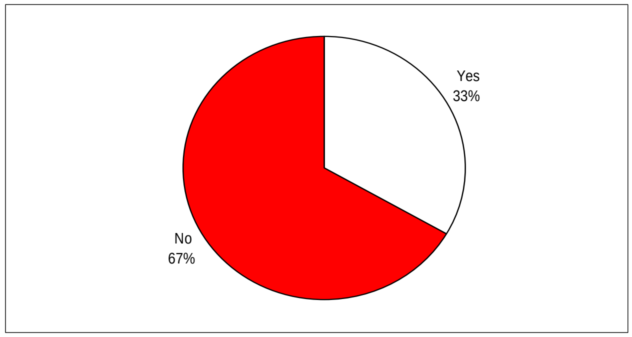


Pg. 44

"Other" risks named were:

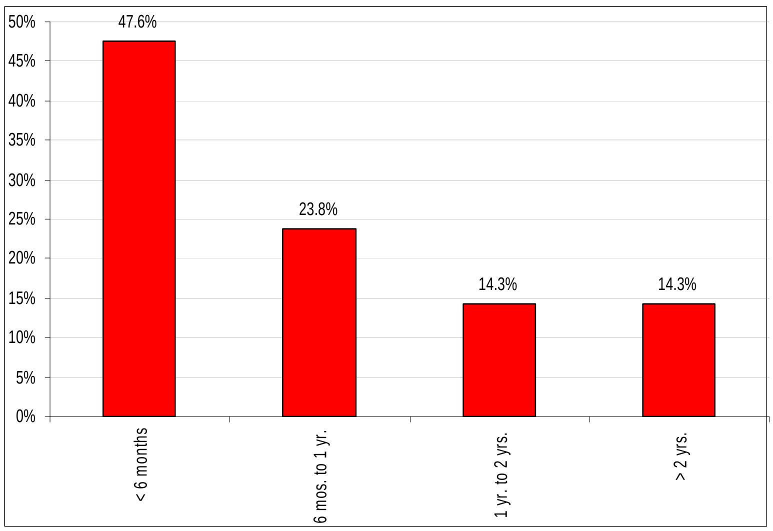
Transportation stoppages - strikes
Port of entry or Trans. strike type event
No delivery of Ordered Goods
Computer Serve & Data Transmissions
Performance
Organized strikes in key ports
Computer system operation failure
La Long Beach Port Closure
Quarantine due to an epidemic (BSE, FMD etc.)
Computer system problems
High cost of operations
Global competition
DR

2) Do you have a business interruption plan?



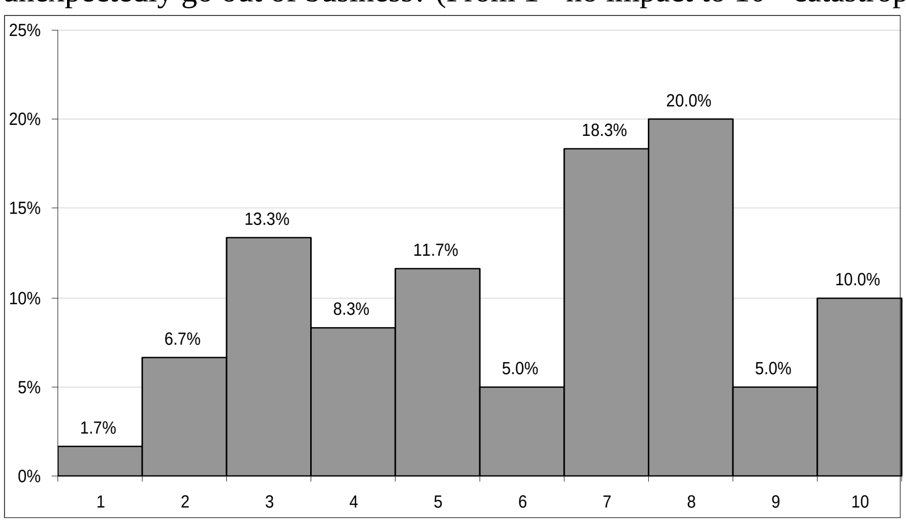
Pg. 45

3) If yes, when was it updated?



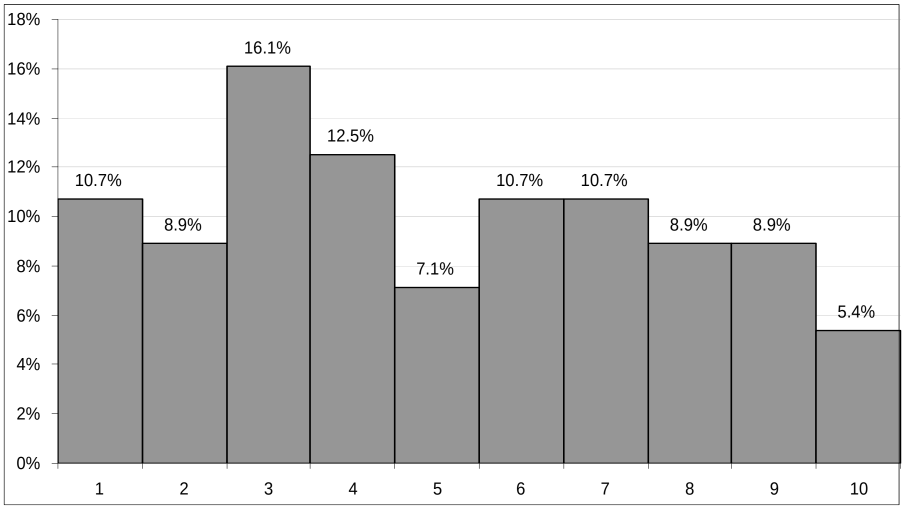
Pg. 46

4) What would be the impact on your company if your main supplier were to suddenly and unexpectedly go out of business? (From 1 - no impact to 10 - catastrophic)



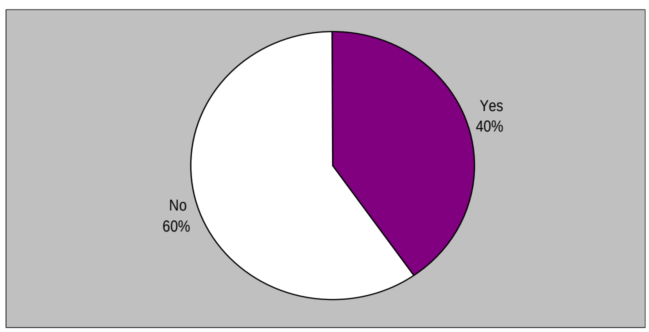
Pg. 47

5) What would be the impact on your company if your main port of entry/exit were suddenly and unexpectedly closed for an extended period? (From 1 - no impact to 10 - catastrophic)



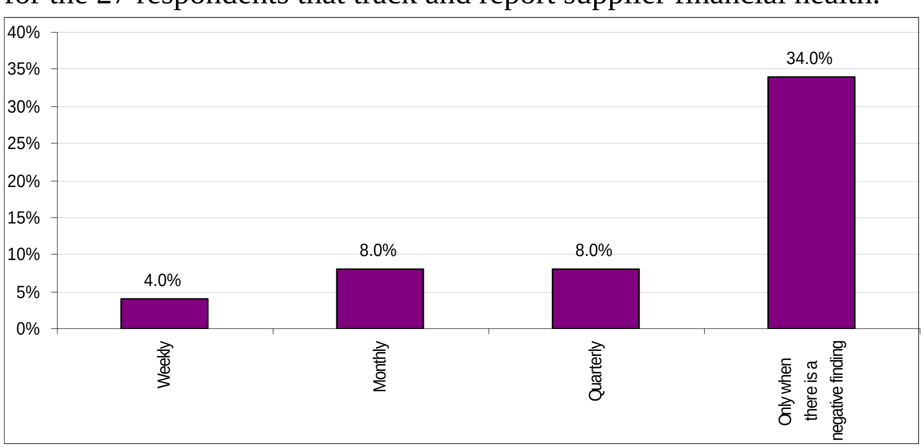
Pg. 48

6) Do you track the financial health and operational stability of your primary suppliers and service providers?



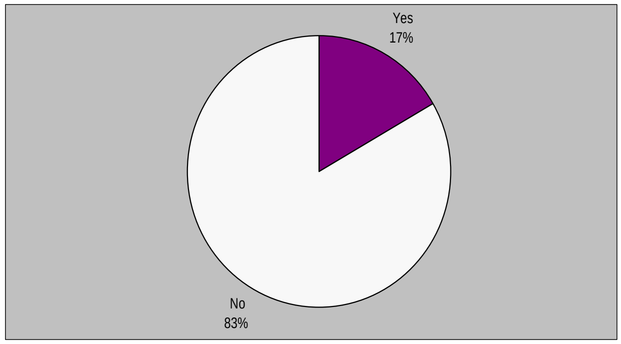
Pg. 49

7) If yes, how often do they report findings? 49 responses - 23 checked, “not applicable.” Graph is for the 27 respondents that track and report supplier financial health.



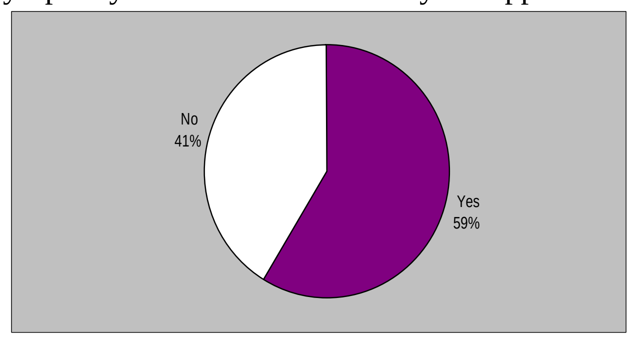
Pg. 50

8) If your company does not currently track the financial health and operational stability of your primary suppliers and service providers, are there plans to initiate such a program?



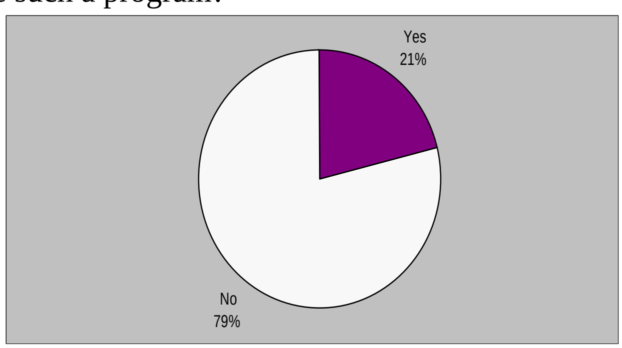
Pg. 51

9) Is it your company's policy to maintain redundancy in suppliers and service providers?



Pg. 52

10) If there is no policy of maintaining redundancy in suppliers and service providers, are there plans to initiate such a program?

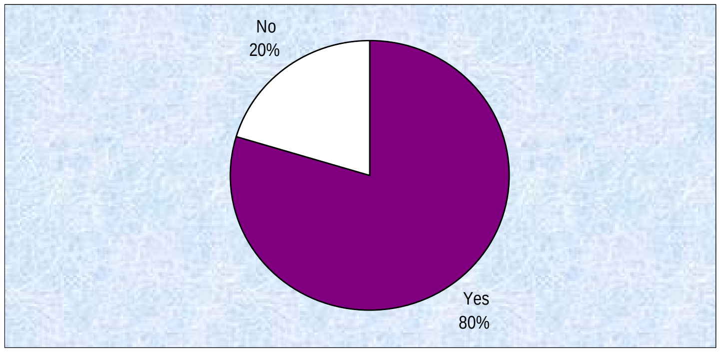


Pg. 53

11) Does your company have a Security/Loss Prevention/Risk Management department?
Yes - 28%, No - 72%

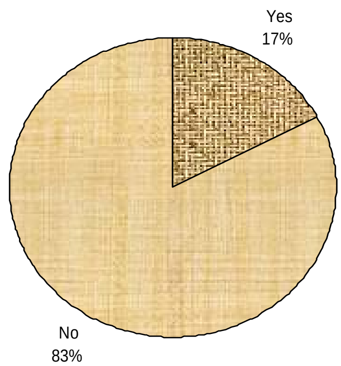
12) Is risk management a core business discipline at your company?
Yes - 22%, No - 78%

13) Is it possible that some logistics best practices could actually increase supply chain risk?



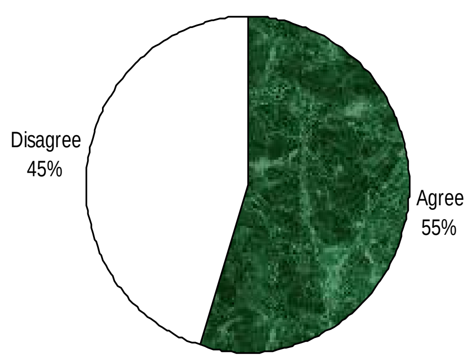
Pg. 54

14) In your view, is supply chain risk management a support function that simply adds to the overhead cost of doing business?



Pg. 55

15) If 'supply chain risk' is anything that reduces the effectiveness of supply chain activities (a dirty bomb at a busy port, a trucking strike, escalating raw material costs, changes in demand, competition, changing legal requirements, fuel costs, the weather, etc.) then risk management is free because managing risk is what excellent companies already do in their day to day planning and operations.

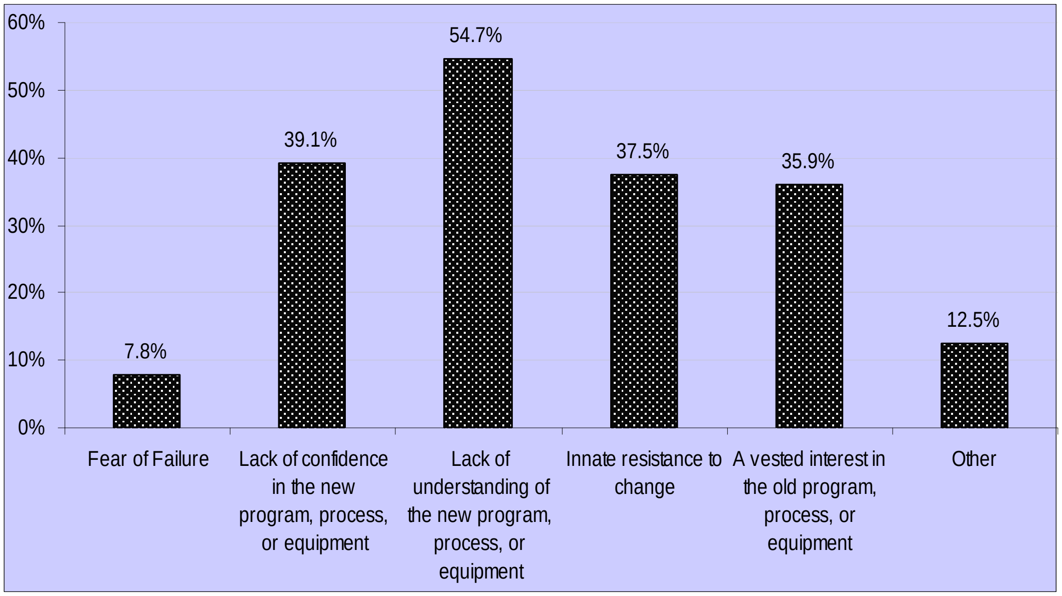


Pg. 56

VI) Change

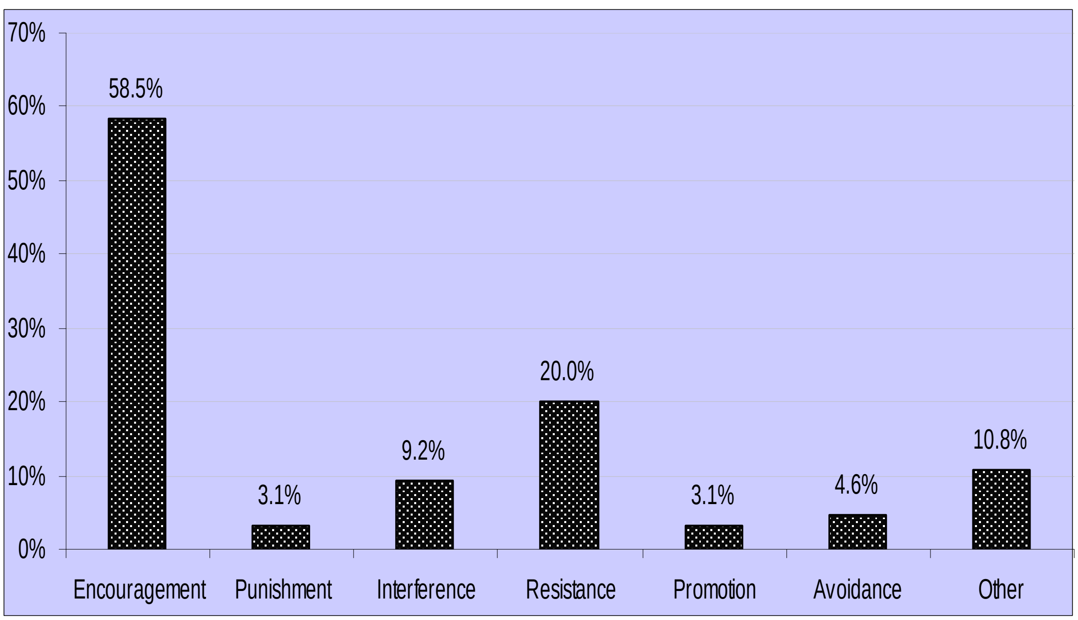
1) Does your company generally embrace change? Yes – 81%, No – 19% (Pg. 57)

2) In those instances where there is resistance to change, what are the two main factors causing the organization to resist change? 63 respondents, 118 responses – this graph shows the percentage of the respondents that selected each factor.



Pg. 58

3) What is your company's response to risk-takers and risk-taking?

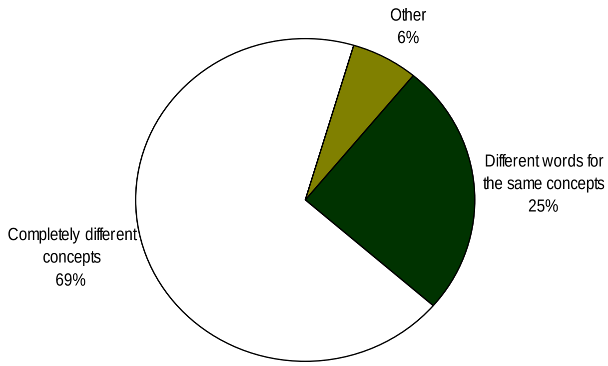


Pg. 59

”Other” Comments:

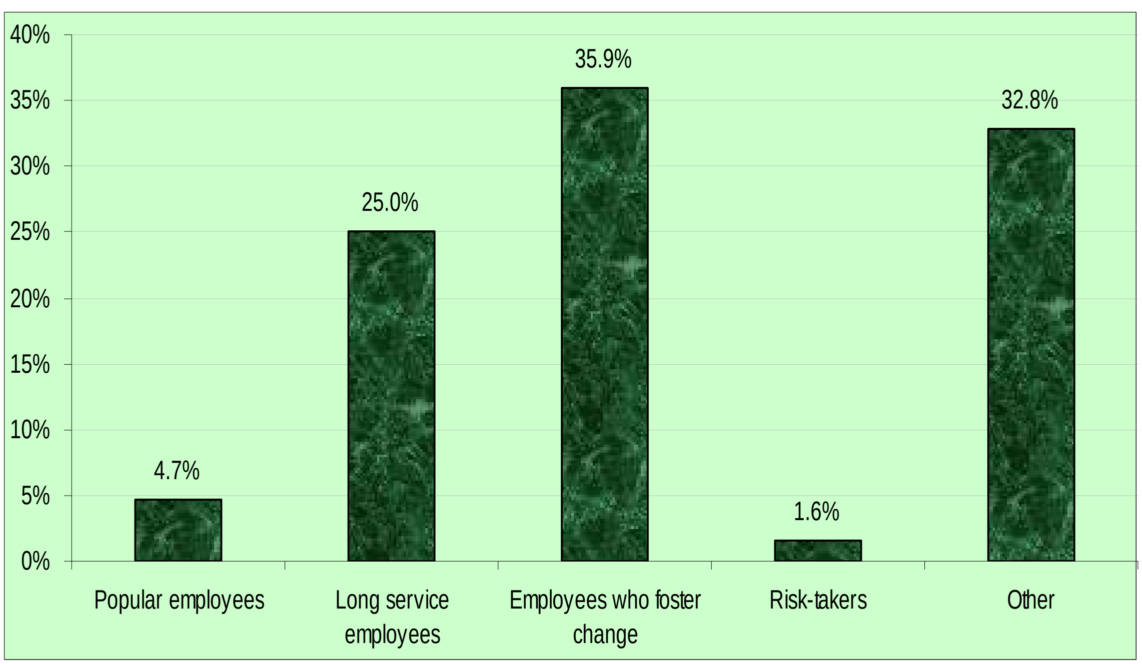
- We expect risk takers to manage risk and to understand it - encouraged. Lone rangers that burn us might feel punished. But if we do get burned, we try to learn from that as well.
- Reward/punishment depending on outcome
- We encourage risk-taking as long as the downside has been identified
- Allow it and coach if appropriate
- Rational judgment
- Caution
- Encouragement/Caution

4) In your company, how are risk-taking and change viewed?



Pg. 60

5) Who in your company are considered heroes and are held up as examples for others to emulate?



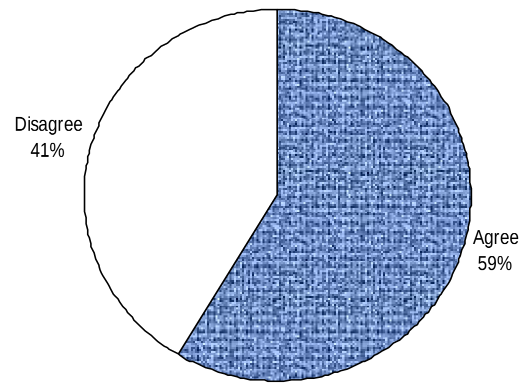
Pg. 61

“Other” Comments:

- Employees who have successfully changed processes
- Customer focused employees
- People who work hard & accomplish successful change
- Staff w/ right attitude and achieve goals
- Those that lead by example
- People who deliver
- Sr. Mgt. that controls the guidance and changes we adopt
- People who lead by example, do as they say, put in the necessary time & energy, and most of all go above and beyond the call of duty
- Those who work hard & smart
- Employees who are proactive and get things done
- Fire Fighters
- Effective Employees
- Those who exhibit the custom rule with customers and /or others people here.
- Performance people
- High output performers
- Employees with good track record of results
- Employees that get results/execute
- Dedicated & Committed
- Leaders who have delivered in the past
- Sales Team - because they are the driving force of the company

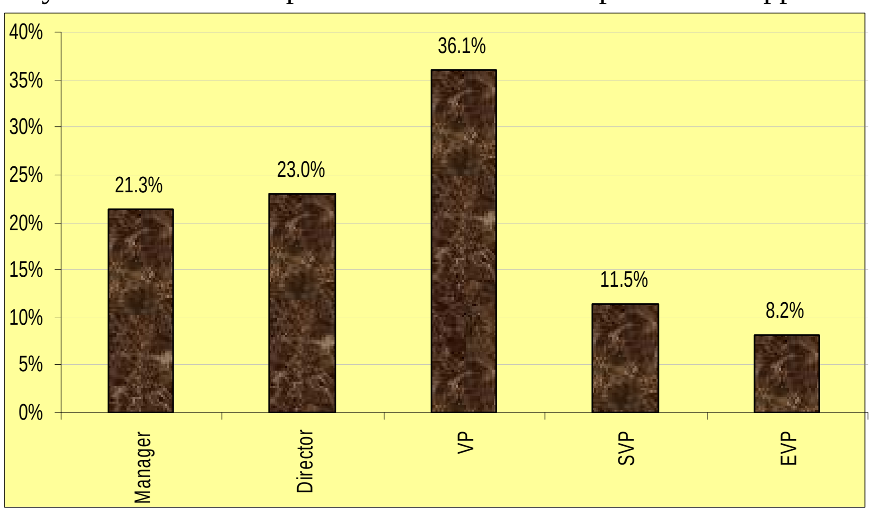
VII) General

1) The solution to supply chain performance is technology.



Pg. 62

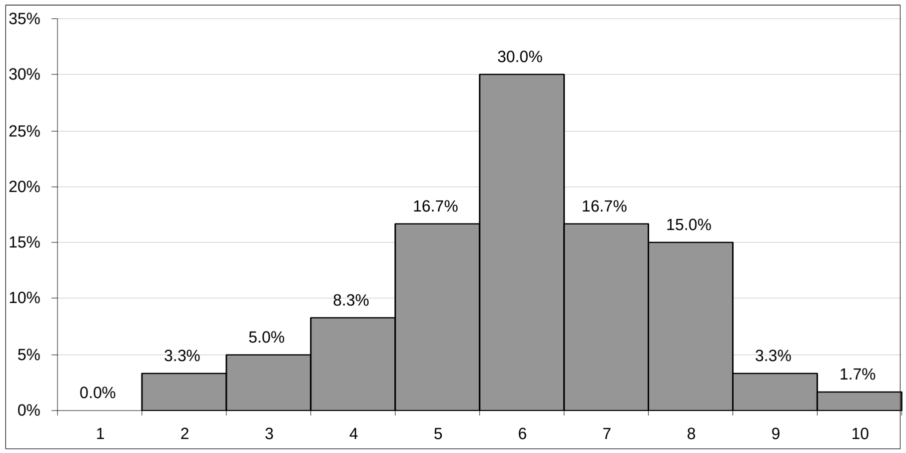
2) At what level in your organization is the senior supply chain executive? In some cases, "Director" may be a more senior position than the title implies in US application.



Pg. 63

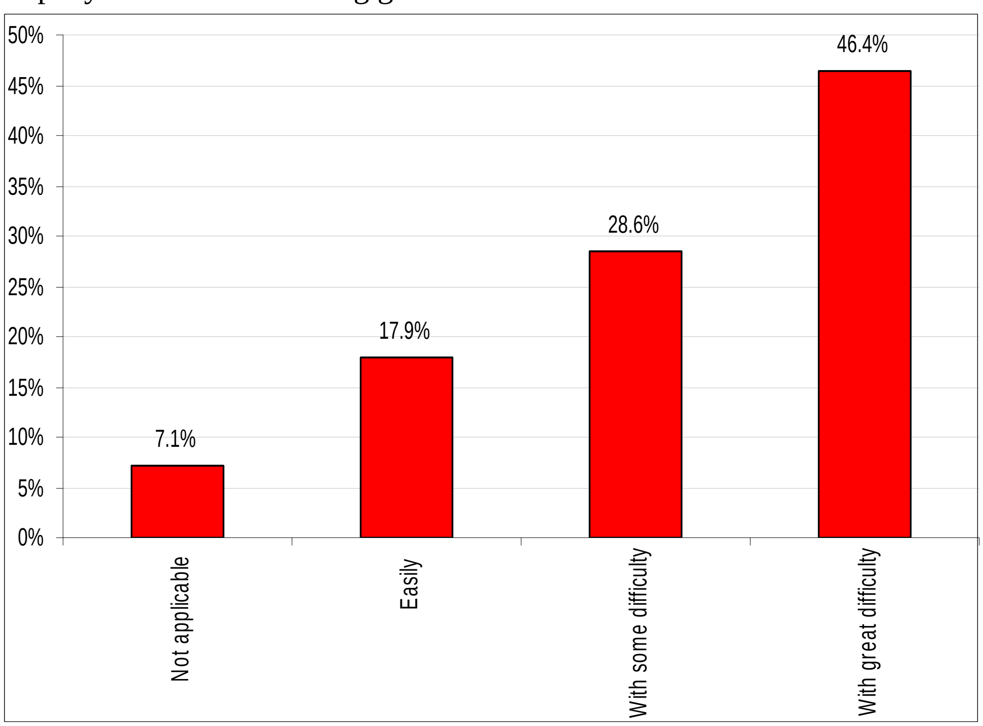
3) On a scale of 1 to 10 how do you rank your company's total supply chain design? The median was 6, the mean 5.5.

Pg. 64



This graph conjures up Jim Collin’s warning, **“Good is the Enemy of Great.”**

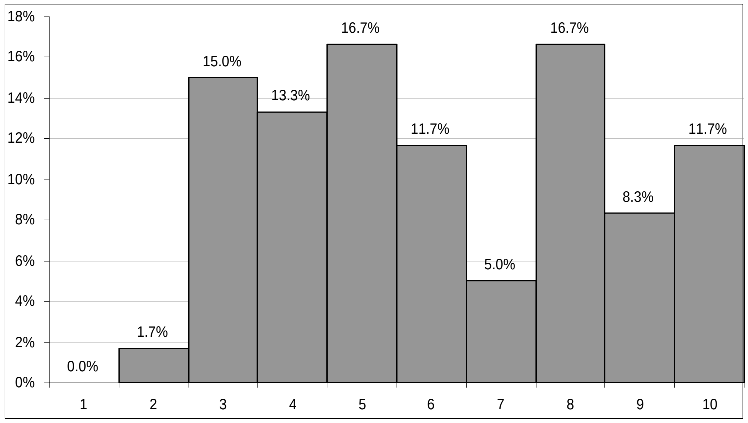
4) If a major US port were put out of service for an extended period of time, how would your company survive the resulting general decline in commerce?



Pg. 65

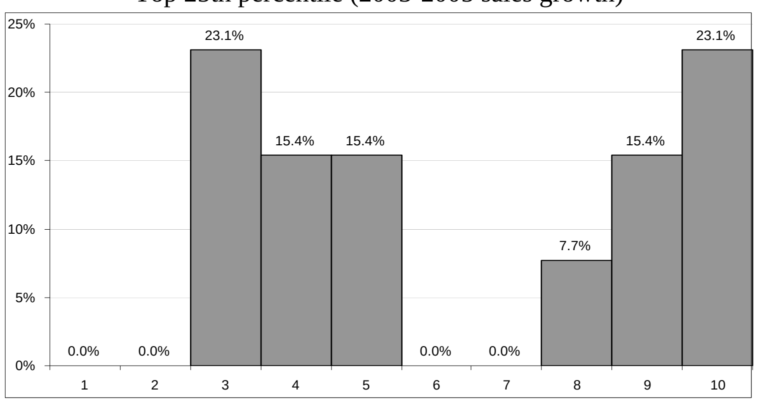
5) On a scale of 1 to 10 how do you rank your company's degree to which the CEO is involved in supply chain design and function?

All respondents



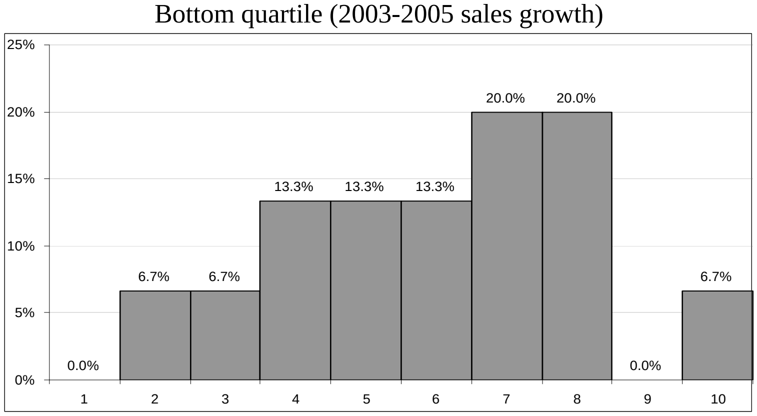
Pg. 66

Top 25th percentile (2003-2005 sales growth)



Pg. 67

Bottom quartile (2003-2005 sales growth)



Pg. 67

6) What percent of imports is shipped ocean? What percent of imports is shipped Air?

72.8 Ocean
11.6 Air
15.6 Truck – by deduction
100.0

7) What percent of your import purchases are paid via letters of credit? Mean 19.2%

8) What percent of your import purchases are paid via wire transfers? Mean 46%

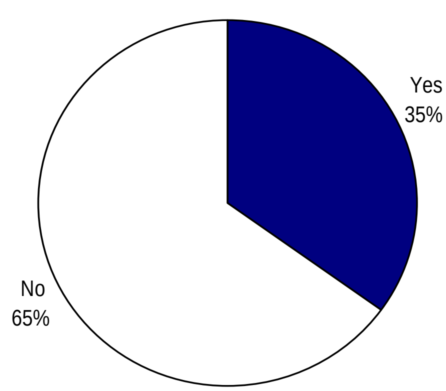
9) Is your company involved in any early payment discount programs for import/export transactions?
Yes – 43%
No – 57%

10) Has your company initiated banking relationships to finance inventory, factor receivables, or extend payables on import purchases/export sales?
Yes – 45%
No – 55%

11) Has your company developed any financial programs to share forecast risks with suppliers/customers on large, long lead-time import/export shipments?
Yes – 11%
No – 89%

12) What is your company's percent of total purchases for imports where your company is the importer of record?
Mean – 50.8%
Median – 63.1%

13) Does your company negotiate its own ocean contracts with steamship lines? (Pg. 68)

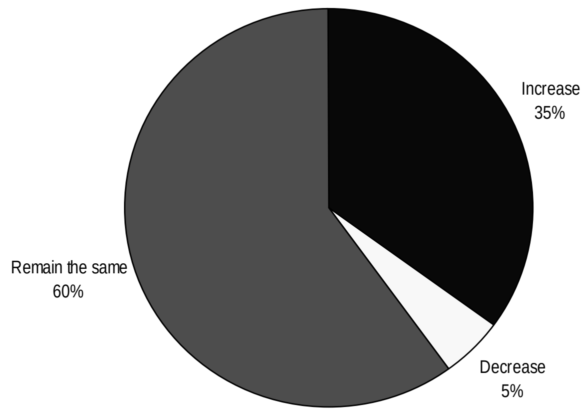


14) What percent of out-bound store or customer deliveries are currently outsourced?
58.6%

15) What percent of domestic distribution center activity is currently outsourced?
14.4%

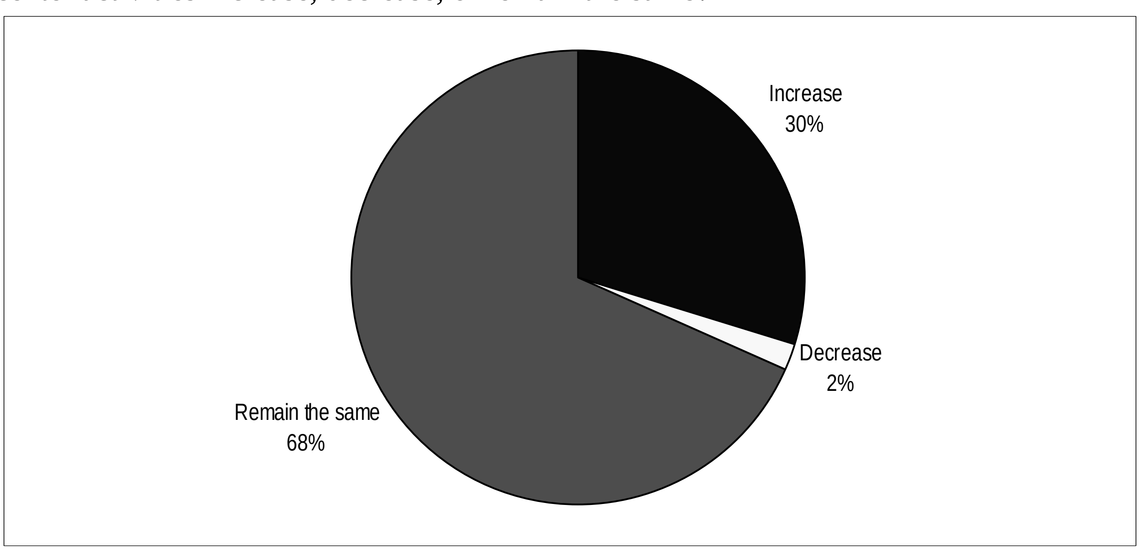
16) What percent of off-shore distribution center activity is currently outsourced?
17.9%

17) In the next two years, will your company's out-sourcing of domestic distribution center activities increase, decrease, or remain the same?



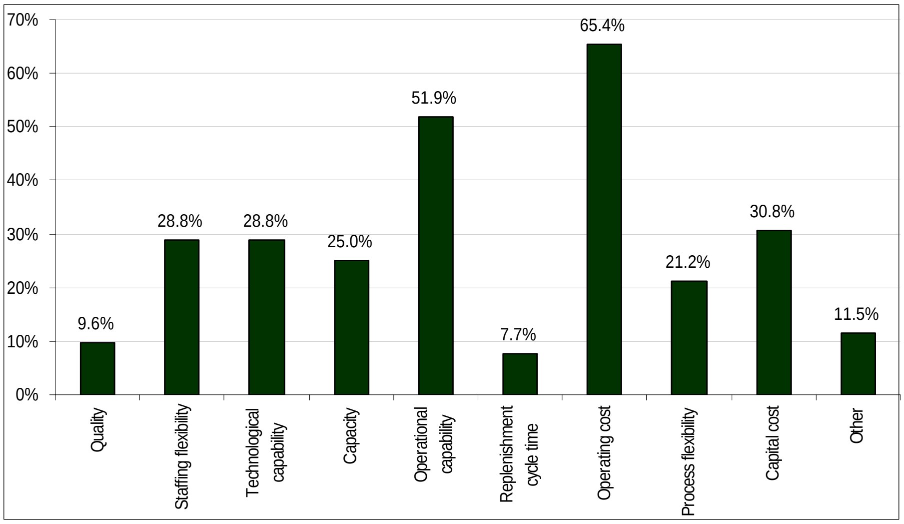
Pg. 69

18) In the next two years, will your company's out-sourcing of off-shore distribution center activities increase, decrease, or remain the same?



Pg. 70

19) What are the company's top three reasons for outsourcing? We asked for the top three. This graph shows when the 51 respondents placed their 143 responses.



Pg. 71

"Other" Comments:
Upgrade management quality in charge of supply chain
Compliance to our customer's logistics requirements
Up-grade private fleet
Direct shipment to Technician
People - lack of talent
Improve Negotiation leverage with current suppliers
Increase the size of the private fleet
Delivery logistics
Customer
Visibility of clients/suppliers inventory
Planning & Accountability in Prod. Development/Design
Eliminate middlemen in the supply chain
Planning & Accountability in production
Centralized Distribution

20) Logistics costs as a percent to sales for companies in the first and forth quartiles of 2003 to 2005 sales growth.

4.7% Top 25%
5.2% Bottom 25%

VIII) Glossary

Having reviewed the survey responses in some detail, I see a need to define a few frequently (and some not so frequently) used terms. These definitions are generally accepted and will be the ones in use for the purposes of the seminar and the following management overview.

DSO/DSI - Ratios used in the Cash Conversion Cycle
DSO - Days of Sales Outstanding = (Accounts receivable x 365) / Annual Net Sales
DSI - Days of Sales in Inventory = (Inventory x 365) / Annual Net Sales

1. *DSO* represents the average time required to collect $1 in receivables — from the time the customer is billed (ideally, when goods are shipped or services provided) until that $1 becomes cash. Businesses that sell their goods and services for cash, as in retail, may have a DSO of only one or two days.

2. *DSI* measures time from the purchase of $1 of raw material to sale to the customer. Manufacturing firms often have a high DSI, while retail DSI is usually lower.
(Adaptation of this concept for businesses that have no inventory will be addressed later.)
Using the formula Cash conversion is the average time for a business to convert $1 of raw material into $1 of cash — it's figured by adding DSI and DSO. To put numbers to these formulas, assume that a business has a DSI of 91 days (which would be an Inventory Turnover of four times a year), and that the average age of its receivables is 48 days, which is fairly common for a business that sells on Net 30 day terms.

DSO + DSI = Cash Conversion Days
48 + 91 = 139 Days to Cash

From: The Cash Conversion Cycle By Kay Rainey

Logistics – This is generally regarded as the planning, procurement, and supervision of in-bound and out-bound domestic and/or international transportation and the physical handling and storage of raw material and/or finished goods with the exception of actual manufacturing.

Mean - The arithmetic mean is what is commonly called the average: When the word "mean" is used without a modifier, it can be assumed that it refers to the arithmetic mean. The mean is the sum of all the scores divided by the number of scores.

Median – The "median" is the middle of a distribution: half the scores are above the median and half are below the median. The median is less sensitive to extreme scores than the mean and this makes it a better measure than the mean for highly skewed distributions. We will be using median rather than mean in most of the following analysis.

Supply Chain – This is Logistics plus:
- Sourcing - Raw Material/Finished Goods Procurement
- Inventory Planning, Inventory Management, Demand Identification
- Inventory and Logistics Related Communications and Visibility to Vendors, Suppliers, Logistics Service Providers (3pl) and Customers
- Inventory and Logistics Related Systems
- Continuity, Risk Avoidance

As you can see, "supply chain" is a rather inclusive concept. This broad definition is necessary for holistic solutions that consider and support the total enterprise.