PARCEL TRENDS REVEALED

Part 2: Results of the Annual *PARCEL* Best Practices Survey

By Marll Thiede

Along with Morgan Stanley, a global financial services firm and a market leader in securities, investment management and credit services, we at *PARCEL* and sister publication *B2C Express* surveyed our readers on the state of their parcel operations. We analyzed over 250 operations that collectively ship 90 million and receive over 30 million parcels a year. In Part 1 of the survey results, we delved into the transportation side of operations, while in Part 2, we take a look at technology, packaging, measurements and management in 170 operations. *PARCEL* has conducted this Best Practices Survey for nine years, and each year, the findings are revealing that managers of the logistics process face ever-changing market conditions, many external to their operations.

The Number One Management Challenge

In Part 1 of the survey, we saw shifting trends through the demise of consolidators, rising surcharges as gas prices climbed and a host of other developments. That's perhaps why when managers were asked what their number one challenge in managing parcel operations was, the top response was "managing costs." As transportation costs continue to surge upward, managers have to look for every opportunity to cut costs on the operational side. Responding to demands voiced by customers, managers cited making sure deliveries arrived on time as the next most frequently mentioned challenge.

Hiring Experts Pays Off

One way to reduce costs, as revealed in Part 1 of the survey results, is to have a consultant negotiate carrier rates. For example, if a consultant negotiated FedEx ground rates, the average discount was 34%, and for UPS ground, the average discount was 35%, compared to the overall average discount of 23% and 24%, respectively. Those who don't use consultants averaged discounts of 21% and 22%, respectively.

Cutting Claims Costs

But when consultants are used to negotiate contracts, do they have an impact on internal costs? Perhaps so. In companies that use consultants, 60% of claims for service failure are paid by the carriers. In contrast, companies that don't use consultants average only 46% paid. Likewise, there are fewer invoicing errors. For every 100 invoices, only one invoice has errors in those companies that use consultants, while those who don't use consultants average six invoices with errors per 100. It is costly for companies to fund personnel to deal with carrier invoice errors and claims; however, some companies have been able to improve that cost.

Automation

Another cost-saving measure is to automate. Logistics managers hope to reduce errors and improve efficiency throughout the process. Those who have implemented warehouse →

Managers' Roles

**63**
Workers

815,160
**Parcels Shipped**

467,440
Parcels Received

>> On average, survey respondents shipping more than 100 parcels a week have **63 workers** in the logistics process and have almost twice as many outbound shipments as inbound shipments.

▸**1 Managing Cost**

▸**2 On-time Delivery**

▸**3 Accuracy/Quality**

▸**4 Damages**

▸**5 Efficiency/ Bottlenecks**

>> Most managers cite **managing costs** as their #1 challenge, followed by on-time delivery.

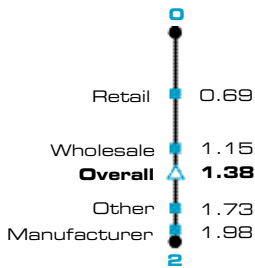

15%
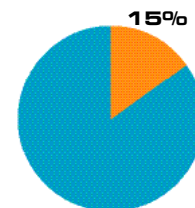
Manage All Functions


24%
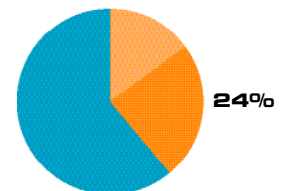
Manage All Except Order Entry and Returns

>> **15%** of managers manage the entire parcel process; another **24%** manage everything except order entry and returns.
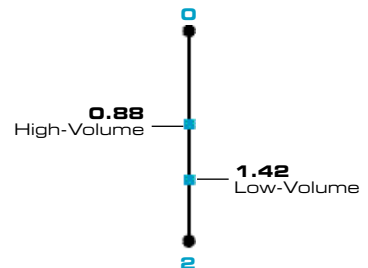
Performance Measures

Order Error Rate

0

Retail — 0.69
Wholesale — 1.15
Overall — **1.38**
Other — 1.73
Manufacturer — 1.98

2

>> The overall error rate (number of errors per 100 shipments) improved from 1.85 in 2005 to 1.38 this year.

0

1.36 More than one manager oversees process.
1.41 One manager oversees process

2
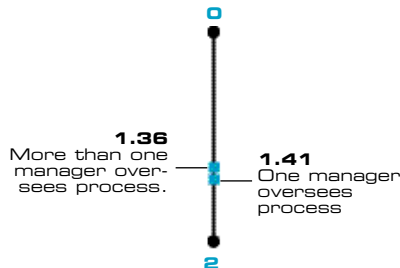
>> Departments must work together well because the error rate varies little by management structure.

0

0.88 High-Volume
1.42 Low-Volume

2

>> The higher the volume of parcels shipped, the lower the error rate.

Return Rate

0

Manufacturer — 1.78
Overall — **1.91**
Retail — 1.94
Other — 1.97
Wholesale — 2.35

3

0

1.83 More than one manager oversees process.
1.99 One manager oversees process.

3

0

1.51 Low-Volume
4.29 High-Volume

5
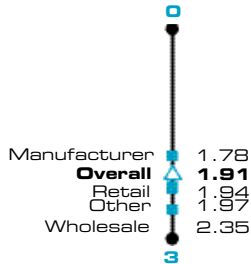
>> Returns are a costly problem for companies. Overall, the return rate has remained consistent from last year (1.96 average in '05).
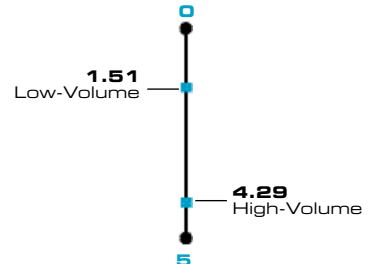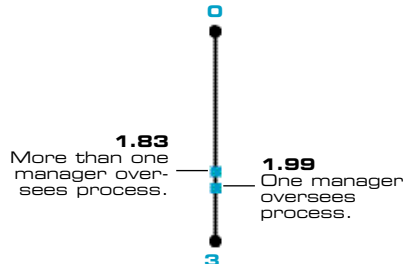
Cycle Times
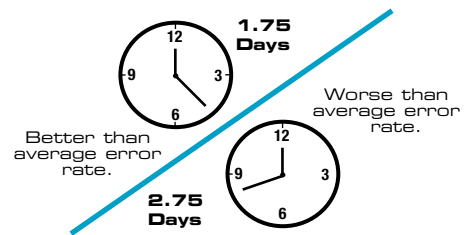
4.0 Total

**2.1 Internal**

DEC 9

>> Overall, companies are averaging about 2 days to process an order and another 2 days for delivery.

|	Total	Internal
Manufacturers	5.5	3.2
Wholesalers	4.3	2.3
Retailers	3.1	1.5
Other	3.2	1.6

>> As business-to-consumer retailers respond to customer demands for speedy service, they have achieved the best cycle times.

1.75 Days
Worse than average error rate.

Better than average error rate.
2.75 Days

Internal Cycle Times

>> Those companies that have a highly efficient parcel processing system also have a better than average error rate.

Labor

$8.00
$7.00
$6.00
$5.00

$7.87
$6.72
$6.48

'04   '05   '06
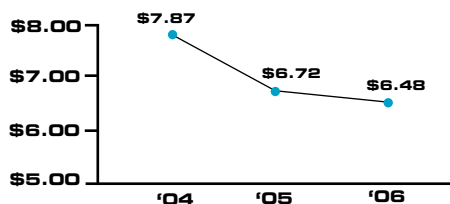
>> The cost to process an order continues to drop as managers work towards improved productivity.

2006

8.6%

▶**2005** 9.4%

▶**2004** 10.4%
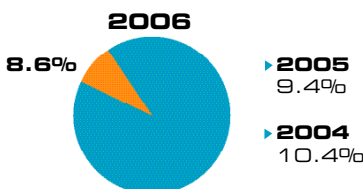
>> The cost of labor as a percentage of company sales also continues to fall.

9.4%
<$25 million in sales

11.8%
>$1 billion in sales
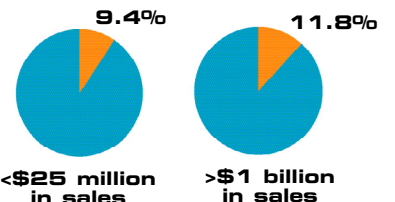
>> The higher the company's annual sales, the more labor resources are needed to process parcels.

Technology

▸1 Computers

▸2 Barcode Scanners

▸3 WMS

▸4 Shipping Systems/TMS

▸5 Forklifts

>> The **top 5 purchases** in 2006 reflect the diversity of investment throughout the parcel process.

Top Users

Technology	Top User
Internal RFID	Manufacturers
RFID Shipping Tags	Wholesalers
Integrated Order Entry	Retailers
WMS	Wholesalers
TMS	3PL

>> Manufacturers have been the first to implement RFID, while 3PLs place a heavy emphasis on transportation management systems.

management systems (WMS) have reduced their error rates by an average of 31%. Operations without WMS have an error rate average of 1.58, while those who have implemented WMS have an average error rate of 1.09. Transportation management systems (TMS) and integrated order entry systems also have a positive effect on reducing the error rate.

Focus on Transportation

This year's Best Practices Survey results clearly show that logistics professionals have needed to concentrate their efforts on dealing with transportation issues in 2006 rather than operational issues. The loss of consolidators and large increases in surcharges forced managers to shift attention to holding transportation costs while maintaining on-time delivery. With lower gas prices, perhaps managers can refocus on improving efficiencies and reducing costs on the operational side of the parcel process.

Until Next Year

We would like to thank Morgan Stanley for collaborating with us to conduct the Best Practice Survey. Also, a special thanks goes to all the logistics professionals — our readers — who took the time to complete the survey. With your input, we are able to develop benchmarks and identify trends in the parcel industry. Next year, we will again survey the industry and report on a decade of survey results. If there are areas of the parcel process that you would like us to cover, please email your suggestions to our editor, Dan O'Rourke, at dan.o@rbpub.com. ■

▶ *For more information on the management aspect of your organization visit www.parcelindustry.com.*

High-Tech Investments

Legend:
- Reported Having Technology in '05
- Reported Having Technology in '06
- Plan to Invest in '06

- **Integrated Order Entry**: 47% / 48% / 7%
- **WMS**: 28% / 30% / 4%
- **TMS**: 15% / 16% / 4%
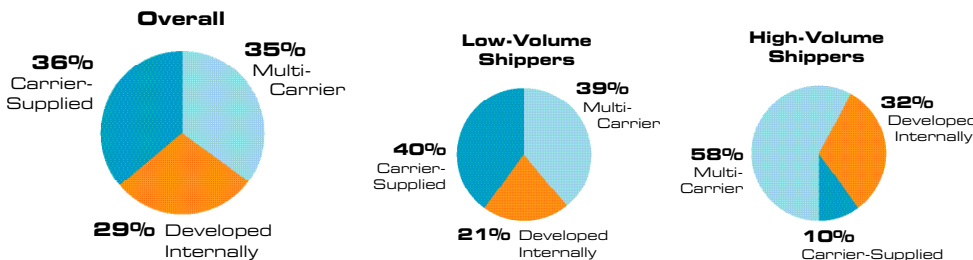- **RFID**: 10% / 11% / 6%

>> Although logistics professionals planned on investing in high-tech systems in 2005, the growth of technology was not that impressive from 2005 to 2006. About the same percent plan on investing in '06 as they did in '05. Next year's results will show if investments improved.

Shipping Systems

Overall
- 35% Multi-Carrier
- 36% Carrier-Supplied
- 29% Developed Internally

Low-Volume Shippers
- 39% Multi-Carrier
- 40% Carrier-Supplied
- 21% Developed Internally

High-Volume Shippers
- 32% Developed Internally
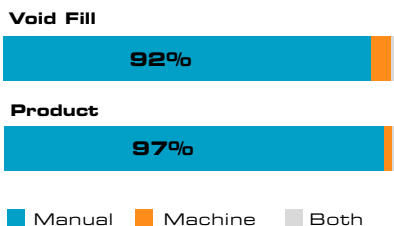- 58% Multi-Carrier
- 10% Carrier-Supplied

>> The smaller volume the shipper has, the more reliant they are on carrier-supplied systems. But overall, shippers are fairly evenly split on the type of shipping system they use.

Packing Technology

Void Fill
92%

Product
97%

Legend: ■ Manual ■ Machine ■ Both

>> Putting product in shipping packages and adding void fill is very much still a manual process. Only 7% have automated void-fill, while 1% have automated but also do some manual void fill. 1.5% have automated placing product in shipping packaging and another 1.5% have a combined automated and manual process.

Protecting Goods

>> For every 100 packages shipped, on average, 1.2 get damaged.

0.5/100

1.0/100

FedEx **1.3/100**

>> Ground Shipments via the USPS had the least damage.

▸**Bubble Wrap 1.1**
▸**Paper 1.2**
▸**Rigid 1.3**
▸**Airbags 1.3**
▸**Peanuts 1.5**

>> Managers make good choices of void fill to protect their products as shown by the slight variance in damaged packages per 100 shipments.
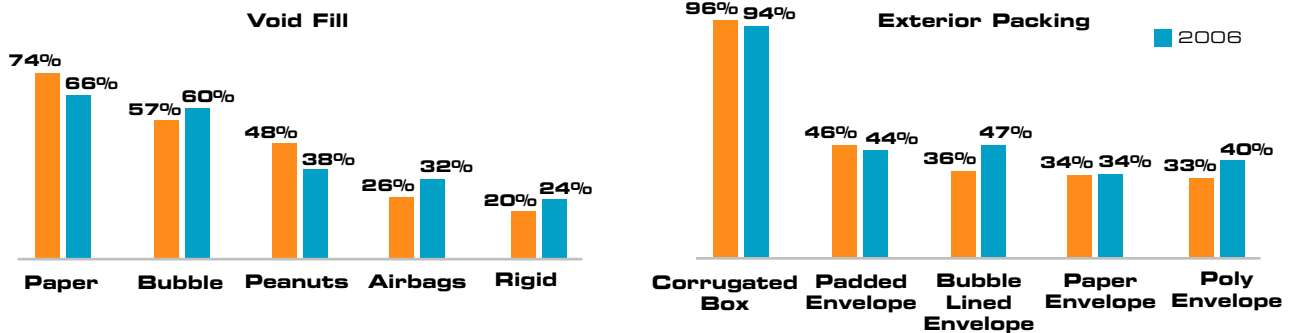
5.7%
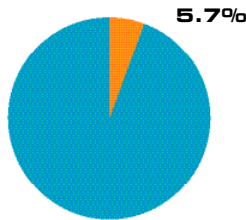
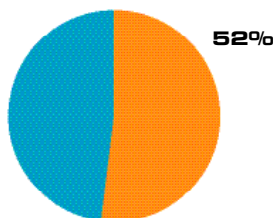>> Shipment packaging is an expensive budget line item; on average, 5.7% of company revenue pays for packaging.

Manual Process	**6.2%**
Average	**5.7%**

>> Manually adding void fill can add another $\frac{1}{2}$ percentile to the cost of packaging as a percentage of revenue.

Packaging Use from '02 to '06

■ 2002
■ 2006

Void Fill

74% 66% Paper
57% 60% Bubble
48% 38% Peanuts
26% 32% Airbags
20% 24% Rigid

Exterior Packing

96% 94% Corrugated Box
46% 44% Padded Envelope
36% 47% Bubble Lined Envelope
34% 34% Paper Envelope
33% 40% Poly Envelope

Carrier Claims

52%

>> Of all claims submitted to the carriers for service failure, only 52% are paid.

5.7%

>> For every 100 carrier invoices, 5.7 have errors.

8.5%

>> Companies with revenues over $100 million have more carrier invoice errors.