



Front of the Field:

How Motor Vehicle Leaders Built Aftersales into Predictable Growth

In a fiercely competitive industry where every company wants to differentiate itself, the companies with the steadiest results all built on the same foundation.

The Winners Focus on Aftersales in Every Cycle

Six companies in this report posted steady revenue growth and margin through every cycle we studied. All six talk about aftersales the same way, in good quarters and in bad.



There are three parts to this report: background on the six companies that came through our screen and how we know it; the operational decisions that enable their results; and a diagnostic you can use to place your own position against theirs.

“When the aftersales market is firm, our sales are kept firm,” Kiyoshi Hishinuma, Komatsu's General Manager of Business Coordination, told investors in 2025, in a quarter when earnings were strong. Many companies talk that way only when new machine sales go soft. The strongest performers talk that way all the time.

We screened publicly traded motor vehicle and aftermarket parts companies and kept only the consistent ones.

The high performers share a simple profile. They grow revenue year after year, and they hold a positive profit margin through the cycle. That screen clears the field fast, and it leaves a short list worth studying: O'Reilly, AutoZone, and Dorman on the parts side, and Caterpillar, John Deere, and Komatsu among the heavy-equipment makers.

Two strategies set apart the companies that keep a high net margin through every cycle: they diversify to perform across the entire cycle, and they run operations efficiently.

Neither is the sort of habit that will pop a share price +15% after they're mentioned on earnings calls, but they keep the steady growth coming.

Every company builds on its core business, and the downturn decides how much of that structure is left standing. A weak aftersales business means the company absorbs 100% of the cycle's inevitable downturn, and takes everything stacked above it along too.

The Consistent Performers Share Two Habits

Six companies clear both bars, and they split cleanly by the habit they prove.

On the equipment side, Komatsu, John Deere, and Caterpillar carry margin through a highly cyclical industry's ups and downs. On the parts side, O'Reilly, AutoZone, and Dorman outpace the competition, growing faster and at higher margin than others, even in a slow-growth industry segment.

Read the assessment by business model, because each group can only prove the habit its economics allow.

The heavy-equipment makers prove diversification, because they balance two businesses at once. The parts retailers prove operations, because aftersales is close to their entire business. A retailer cannot teach an OEM how to balance machine sales against parts, but it can teach everyone how to deliver.

OEMs Prove Diversification Across Cycles

COMPANY	FINANCIAL SCREEN	SIGNATURE MOVE
Komatsu	Growing margin on growing revenue. The only major OEM in the screening that avoided the 2024 slowdown.	Extended warranties and remanufacturing. 52% of construction and mining revenue came from aftersales ¹ (Komatsu calls this Aftermarket in their financials) in 2025. They project this to be even higher in 2026.
John Deere	Consistently high margin across the full screening period. Margin held as revenue fell.	Connected support and downtime monitoring ² , as well as parts built to the right specs for the machine – consumer lawn tractors aren't built like golf course mowers because they don't need to be.
Caterpillar	Strongest margin of the screening period came in 2024, the year sales slowed. Revenue grew again into 2025.	Sector diversification through data-center gensets ³ . Financials are strong, but our opinion is that exposure to a single cycle remains

Parts Retailers Prove Operational Delivery

COMPANY	FINANCIAL SCREEN	SIGNATURE MOVE
O'Reilly	Sustained margin near 14%, with revenue growth ahead of the segment.	Parts availability and organic store expansion. Added 207 locations since 2019.
AutoZone	Sustained margin near 14%, with revenue growth ahead of the segment.	Availability and "WOW customer service" in their words. Added more than 1,600 locations since 2019.
Dorman	Consistent margin near 10% and rising. Growth held through the COVID peak and continued into 2024 and 2025	Serves the motor vehicle aftermarket exclusively, focusing on key equipment ages with big addressable markets

¹ https://www.komatsu.jp/en/-/media/home/ir/library/results/2025/en_fy254qpresentation.pdf

² <https://www.deere.com/en-us/parts-owner-support/connected-support>

³ https://s25.q4cdn.com/358376879/files/doc_financials/2026/q1/Q1-2026-Earnings-Transcript.pdf

Winners and Laggards Each Run True to Type

■ Strong
 ■ Above average
 ■ Mixed
 ■ Weak
 ■ No data

Company	Segment	Revenue growth	Margin	Aftersales emphasis on calls	Screen result
Komatsu	HE OEM	Strong	Strong, rising	Strong	Cleared
John Deere	HE OEM	Mixed	Strong	Strong	Cleared
Caterpillar	HE OEM	Strong	Strong	Moderate	Partial
Parts retail	Parts retail	Strong	Sustained	Focus area	Cleared
AutoZone	Parts retail	Strong	Sustained	Focus area	Cleared
Dorman	Parts mfr	Strong	Consistent	Focus area	Partial
Bottom half, heavy equipment	HE OEM	Mixed	Weak or inconsistent	Reactive	Did not clear
Bottom half, parts	Parts retail & mfr	Mixed	Weak or inconsistent	Focus area but tends to be more reactive	Did not clear

Source: Ducker Carlisle analysis. Aftersales emphasis on calls: Strong = raised as a standing priority in every quarter. Reactive = typically mentioned only in down cycles, as a fallback



The companies that did not clear the screening share a profile as consistent as the winners.

None of them post both steady revenue growth and sustained margin. Among the OEMs, we only see mention of aftersales when it's the only success story. Among the parts retailers, they tend to be more focused on acquisitions, trends, or financials rather than operations excellence.

WHAT WE DID NOT FIND

The winners were not the companies that said "AI" or "acquisition" most often on their calls. In fact, being highly acquisitive tended to hurt performance, perhaps because operational consistency fell apart after large acquisitions. The pattern that separated them was diversification across cycles and plain operational discipline. That counter-narrative runs through the rest of this report.

Diversification Means Surviving the Cycle

Diversification here means holding revenue steady when the cycle turns, which is not the same as selling across sectors.

Caterpillar sells large power generators to data-center builders, and Mitsubishi has sold across nearly every industry for generations. Both are good businesses, and a company that makes engines well should sell engines to whoever wants them. Neither move does the job this report outlines, because a company can sell into many markets and still fall when those markets turn together. Business cycle moves tend to be highly correlated.

A stable aftersales base is what makes the bolder move possible.

A company with predictable revenue underneath it can enter a new market because it chose to, on its own timing, and can stay in that market through a slow start. A company without that base enters new markets because the old one stopped working, which is a risky moment to try something unfamiliar. The two work together: aftersales is the foundation, and sector expansion is one of the things worth building on it. Companies keep their core business stable and growing and invest into adjacent markets all the time. In this case, aftersales is a critical piece of the growth.

Aftersales is what keeps revenue flowing when new machines stop selling.

An OEM sells the machine for high revenue and thin margin, and earns a higher margin on parts (yet with lower revenue). More important than the margin difference is the pattern: aftersales revenue holds roughly steady while machine revenue swings around it based on business conditions. This makes the combined revenue from new machines and parts less volatile than the machine revenue alone. Aftersales revenue does not lift the top of the cycle, but rather dampens the bottom of the cycle.

The stabilization matters most in heavy equipment, where the swings are brutal.

In automotive, a lousy year may result in a drop of new-vehicle sales in the range of a few percentage points. In heavy equipment, sales of new machines can go up or down by 25% to 50% from one year to the next.

The earnings calls reveal who has it right.

Poor-performing companies don't mention aftersales when machine sales are high, implying that they focus on something better in years at the top of the cycle. Strong performers stress it every quarter, good or bad, and this drives their profitability and margin

Checklist:

Pressure-test Your Diversification

- Do you know your revenue and profit split across machine sales, financing, and parts and service?
- When machine sales last fell, did aftersales revenue hold, or fall with them? By how much?
- In your last strong quarter, how often was aftersales mentioned at leadership levels compared to in a weak quarter?

QUESTION TO CONSIDER

What do your best salespeople pitch in a strong quarter? If dealers stop mentioning service contracts, remanufactured parts, and uptime monitoring the moment machine sales get hot, the diversification is not there.

Holding revenue through the cycle depends on one thing: an aftersales operation good enough that customers stay.

The Boom Is Where Aftersales Gets Lost

The trap is a good year.

When demand for machines is high, the sales staff says they do not need aftersales to close deals. When power generation sells for above list price due to the data center boom, why would a dealer sales rep risk making a sale a little trickier by tying in a service agreement to secure that deal? It is because in a couple of years, when the backlog clears and the market softens, the parts and service revenue keeps flowing.

The incentive problem gets worse in a boom, not better.

That compensation conflict is survivable when machines are hard to sell, because the representative needs the service attachment to close. In a boom, the machine sells itself, so the attachment becomes pure friction, and the attach rate collapses precisely when it is cheapest to win. Attach rates earned in the boom are the revenue that shows up in the downturn.

Your ability to hold revenue in a downturn depends on the operations you built in the boom.

The bottom of the cycle is the wrong time to rebuild aftersales, because you lose retention on the way down and do not win it back on the way up. Automotive shows this more sharply than heavy equipment, because car owners have more places to take their service business when money is tight. In a downturn like 2020, those customers defect, and many never return.

One rule holds across the cycle: fund aftersales operations regardless of what the current sales number looks like.

That is what keeps revenue volatility low, and margin volatility with it.



The Best Makers Design Aftersales In, Not Bolt It On

The failure pattern is a silo: the new-machine business is separate from the aftersales team, with little interaction between the two.

The structure made sense once and outlived its logic. Heavy-equipment makers cannot afford it, because their cycles swing hard and their customers build entire operations around the machine running. The best ones respond by packaging the machine and the aftersales into one bundle. John Deere is a clear example of the two sides working closely together.

We map aftersales delivery on a spectrum with four zones.

Positions are continuous rather than fixed, and companies within a sector generally sit closer together than they do across sectors. The further up a product sits, the less downtime its customer absorbs, and the more that customer will pay to stay there. Where a product belongs depends on the customer, not on the maker's ambition.

The Uptime Spectrum

	Uptime Zone	Typical Product
↑ more valuable	1 Make it not break, ever	None today, but mining equipment is at least a potential candidate
	2 Service it before it breaks, predictably	Combine
	3 Service it before it breaks, unpredictably	Class 6 Truck
	4 Service it after it breaks	Consumer Lawn Tractor

Source: Ducker Carlisle

1. Zone one is engineering the failure out.

No one builds a zero-downtime machine. But John Deere (among others) builds machines that last longer, with better materials and guards that keep debris away from internal parts. This helps, but we don't see any OEMs delivering unbreakable machines – and we don't believe there are customers who are willing to pay for it. This level is the top of the spectrum but unrealistic to really deliver.

2. Zone two is forecasting the failure.

Most heavy equipment companies and/or dealers monitor complex machines to attempt to identify failures before they happen. The missing piece here is connecting the data event (most commonly a fault code) to the solution. Companies log vast amounts of data and they may know what will fail...but they don't always know how to prevent it from failing.

3. Zone three is reacting fast to the failure nobody saw coming.

Volvo Group is an industry leader with Uptime Centers that return trucks to the road within 24 hours when the repair runs under four hours of service time. Roughly 25% of its dealers carry the certification. The promise is company-wide. The delivery is one dealer in four.

4. Zone four is fixing it after it breaks, where most of the sector still sits.

This is the bare minimum and sadly some companies still fail to deliver. The part has to be on the dealer shelf the moment the customer needs it, and most makers do not track closely enough to know whether it is.

The best makers match the product to the zone its customer needs.

There is no single correct position on the spectrum, because the cost of a failure depends entirely on the customer's operation. A homeowner whose lawn tractor will not start borrows his or her neighbor's tractor or lets the grass get a bit long. A mining operation whose haul truck will not start loses thousands of dollars every hour, 24 hours a day, until it runs again.

That difference is why the same manufacturer can sit in two places at once and be right both times.

John Deere sells a consumer mower that lives comfortably in zone four, where the customer pays two thousand dollars, takes the machine home, and accepts that a failure means a trip to the dealer for a \$50 part. John Deere sits in zone two for light construction equipment, where the customer builds a season around the machine running. Komatsu builds to a higher standard and prices accordingly, and its customers pay for that because their downtime is expensive. Both John Deere and Komatsu offer even higher levels of support for customers who truly don't want to risk much downtime at all. Komatsu Care Plus III even offers cost-per-hour billing.

The failure is sitting in the wrong zone for the customer you sell to.

Selling lawn tractor-level service to a mining customer is destined for failure. Similarly, pushing uptime monitoring, a container full of spare parts, and an on-site technician is overkill for most machines and customers. The work is knowing which customer you have, then delivering that zone completely rather than partially.

Downtime carries a price, and the customer is already paying it.

The American Transportation Research Institute puts the average cost of operating a Class 8 truck at \$2,336 per mile in 2025, the highest in the history of its benchmarking series. This is equivalent to \$106.69 per hour. Limiting this to the costs incurred from a sitting truck and driver means we exclude items like fuel and tire wear, and keep items like depreciation, insurance, and driver wages. A sitting truck incurs costs of \$73.10 per hour. A machine in the shop earns none of that back. A single unplanned event compounds it further once towing, lost labor, replacement parts, shipper penalties, and lost margin are counted.

The pressure is building rather than easing.

Repair and maintenance costs rose 8.6% in 2025, one of the fastest-rising line items in the industry, and ATRI expects tariffs on imported parts and steel to keep them climbing.

The move is to price your aftersales directly against your customer's downtime.

Most makers have never run that comparison, so they sell service on what it costs them to deliver rather than against what a stopped machine costs the customer.



QUESTION TO CONSIDER

Your customers already know what a day of downtime costs them. Do you?

⁴ <https://www.deere.ca/assets/pdfs/common/products/ultimate-uptime-dkefeuu.pdf>
⁵ <https://www.komatsu.com/en-us/services-and-support/komatsu-care-programs66>
⁶ <https://truckingresearch.org/wp-content/uploads/2026/07/A-TRI-Operational-Costs-of-Trucking-07-2026.pdf>
⁷ <https://truckingresearch.org/wp-content/uploads/2026/07/A-TRI-Operational-Costs-of-Trucking-07-2026.pdf>

Operational Delivery Separates Winners From Laggards

A plan on the whiteboard means nothing if the part does not arrive.

The parts retailers prove it. O'Reilly and AutoZone sell into a market that barely grows, where the number of cars on the road rises with population and dollars rise with inflation. Both have increased revenue and held margin in that market year after year.

It is the no-frills way to win.

O'Reilly and AutoZone focused on making the product easy to buy and get in a hurry. They opened stores organically, so stock sits closer to the customer and delivery gets quicker still. Since 2019, O'Reilly has opened 207 more stores. AutoZone has more than 1,600.

The split in the field is stark.

Roughly half of the major parts retailers focus on the unglamorous operational work, and it compounds for them year after year. The other half buy growth through acquisition, which flatters the share price and strains the operations underneath.



The winners attribute their success to boring grunt work, not to any flashy innovation.

Their gross-margin improvement came from the supply chain and store teams and the logistics networks that support them doing their jobs well, rather than by cutting headcount through automation or acquisition, or opening a new store.

"OUR GROSS MARGIN PERFORMANCE IS THE RESULT OF THE COLLECTIVE EFFORTS OF OUR SUPPLY CHAIN, STORE, AND DISTRIBUTION OPERATIONS TEAMS."

Brent G. Kirby, O'Reilly President, Q4 2025

AutoZone tells the same story, crediting availability and service rather than any single clever move.

"WE KNOW OUR FOCUS ON PARTS AVAILABILITY AND OUR WOW CUSTOMER SERVICE CULTURE WILL LEAD TO SALES GROWTH AND GAINS IN MARKET SHARE."

Phil Daniel, President and CEO, AutoZone, Q1 2025

Uptime and parts availability sell the same thing: peace of mind.

Buyers pay a premium for equipment they believe will keep running, well past what the job strictly requires, because they want to avoid dealing with failure at all. Make it effortless, and they stay.

QUESTION TO CONSIDER

Your customers would rather not think about parts or downtime at all. *How much of your aftersales design starts from that fact?*

Operational quality shows up in the financials, and we can see it in client data.

Two vehicle makers of comparable size are at opposite ends of it: the first is strong at both parts distribution and service operations and keeps its customers; the second is weak at both and loses them to competitors. The split repeats among parts retailers, where the companies that bought growth through acquisition strained the operations underneath and carried higher costs into a more volatile market.

We think this is cause and effect, not coincidence.

Operational strength is not the only driver of financial performance and may not be the largest, but the pattern holds across business models and across the cycle, which is more than a companion variable would do.

Bad operations compound.

Stock out of the part and you never get the sale in the first place, nor do you see the demand. Send the wrong part or send it late, and you pay for the replacement, absorb the penalty, and then do it again on the next order...and then you may still lose the customer. Most companies carry a single average figure for what a service failure costs, which is the number least likely to be right. The cost of one error ranges from a few dollars to several hundred depending on what failed and where, and an average that wide is not a number you can manage against. We know what the actual cost is for many companies.

The compounding gets worse in the downturn, when penalties land at the same moment revenue softens.

The worst time to fail a customer is when there are other companies begging for their business. The best aftersales program in the industry still loses if the parts do not arrive.



Checklist:
Check both halves of delivery

- **Supply chain:** How often is the part on the shelf in your warehouse when the customer needs it (fill rate)?
- **Distribution:** What percentage of the time does the part leave the shelf and reach the right customer on time (on-time delivery, error rate)?
- Are you adding capacity organically, closer to customers, or buying growth through acquisitions?
- Do you know what a service failure costs by root cause, or only as a single blended average?

Winners Know Their Numbers Before They Promise Anything

FILL RATE HAS THREE LEVELS

Most companies cannot tell you how good their own operations are because they measure them poorly.

When a senior executive at one large OEM departs for a smaller one, the first phone call is almost always the same request: “Our performance is weak; send us your calculation methodology so we know how we compare.”

Knowing your fill rate is good if you know how you calculate it, whether it compares to a competitor's number, and whether it holds across your whole network. Otherwise, it's a pacifier.



1. **System fill widens the lens to the network.**

It calculates how many order lines were filled and arrived on time and complete from any warehouse, not only the nearest warehouse location. It is the measure that you use to look at fulfillment success compared to back-order incidence.

2. **Facing fill is the bedrock.**

It measures the percentage of order lines that each warehouse fulfills for its customer base, highlighting how each location is performing individually.

3. **Off-the-shelf fill goes one level deeper, to the shelf closest to the customer.**

At an OEM, this is measured at the customer's dealer. At a parts retailer, it's measured at the customer's retail store or local fulfillment center. It measures what the retailer has on hand at the moment the customer wants the part, which tests stocking effectiveness and forecast accuracy at once. This is ultimately what everyone needs to measure.

Fill is Most Important at the Level the Customer Sees

The level you measure at matters as much as the metric.

You can calculate fill for individual pieces, by line, or by repair order. And if you are not measuring at the repair order level, then you are not seeing what the customer sees, and you are not running a tight enough operation to promise a service level you can hold.

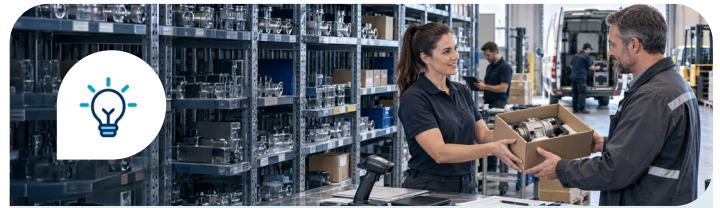
Supply Chain Quality Must be Measured Precisely

A single blended quality number is worse than no number. Failures come from three main sources, and one figure hides all of them.

Warehouse operations ship the wrong part or the wrong quantity. Packaging and labeling fail. Transportation damages what left the building intact. Until you separate those root causes, you are guessing at which one to fix.

Poor measurement and poor coordination have the same root: no function tells the next one what it knows.

Suppliers deliver slightly late, but no one tells the inventory planners. Suppliers use the wrong packaging and no one tells the warehouse. The packager packs the wrong quantities, and no one updates the system. The system allows warehouse workers to punch the right set of keys to bypass controls, and management doesn't see it. Supply chain quality issues can almost always be attacked through a good root cause analysis.



KEY TAKEAWAY

None of it counts until the part is in the customer's hands. You can design the best aftersales program in the industry and still lose on penalties, because the customer measures you on arrival, not on intent.

Do you know your late-delivery rate well enough to price that risk?



Checklist: Where Do You Stand?

- Do you measure facing fill, system fill, and off-the-shelf fill, or only one of the three?
- Do you calculate fill at the repair order level, or stop at the piece or line level?
- Does your quality reporting separate warehouse errors, packaging failures, and transportation damage?
- Do you know how your numbers compare to best in class, and what closing that gap is worth?

Most Executives Cannot Answer These Questions

The two habits reduce to a short list of questions, and most executives cannot answer them without a week of work.

Six companies came through the screening and split cleanly by the bar they clear. Komatsu, John Deere, and Caterpillar clear both: they carry margin through an industry that swings hard, and they run operations tight enough to hold it.

Because they only do parts, O'Reilly, AutoZone, and Dorman can focus on clearing the operational bar – which they do. All six companies know their performance numbers by heart, and knowing them is not separable from performing well against them.

Diversification.

What share of revenue comes from machine sales, from financing and insurance, and from parts and service contracts? What is the same split for profit? When machine sales last fell 10%, what happened to aftersales, and how far does that revenue move year to year?

Operations.

Where do you stand on fill rate, on-time delivery, error rate, floor denial, and back-order duration? Best in class, or bottom quartile? A company that cannot place itself on that scale cannot credibly promise a service level, and should not sell against one.

A scored version of that diagnostic is available for readers who want their own benchmark.



Heavy Equipment Leaders Built the Foundation First

Komatsu's Kiyoshi Hishinuma had it right: firm aftersales keeps sales firm, in booms and busts alike.

Six companies came through the screening across the period we studied, and none of them got there through a single decisive move. They treat aftersales as a core business in every quarter, strong or weak, and run operations tight enough to deliver what they sold.



Nate Chenenko **Principal**

Nate is a Principal at Ducker Carlisle where he leads Carlisle's global benchmarking activities. Nate holds a bachelor's degree in political science and economics from the University of Rochester. Nate has ten years of experience in motor vehicle aftersales and leads projects primarily focused on benchmarking in parts logistics, service, and finished vehicle logistics. Nate also leads Carlisle's emerging trends research, which he presents during Carlisle's annual conferences and at other industry events.



Korin Hasegawa-John **Managing Principal**

Korin is a Managing Principal at Ducker Carlisle where he leads the Heavy Truck and Heavy Equipment strategy practice and specializes in aftersales parts and service strategy and operations. Korin holds a B.A. in Economics and Classics from Tufts University. He has led, managed, and staffed critical engagements across all areas of the aftersales business at Ducker Carlisle for over 12 years. Clients value Korin's strategic perspective and collaborative, cross-functional approach to sustainably improve aftersales profitability through customer value generation.



Nicole McGregor **Managing Principal**

Nicole is a Managing Principal at Ducker Carlisle where she leads the Global Heavy Equipment practice and specializes in a wide variety of methodologies and project types including Pricing, Competitive Intelligence and Voice of the Customer. Nicole holds a Bachelor of Science degree in Marketing from Indiana University. She has worked with Ducker Carlisle for her entire career of over 25 years where she has demonstrated skill with Key Account Management on a global scale. She has supported and grown accounts which have been loyal Ducker Carlisle partners for over 30 years, and have benefited from information enabled decision making support for revenue growth. Nicole is an active member of American Equipment Manufacturers (AEM) Association.



Billy Murch Elliot **Associate Principal**

Billy Murch Elliot is an Associate Principal at Ducker Carlisle, joining the firm in 2019. She leads content delivery for benchmarking conferences and custom studies, specializing in aftersales parts and fixed operations. Billy holds both a BS in Communication and Business and a Masters in Management from Cornell University.

To discuss how Ducker Carlisle can help your organization,
contact our Heavy Truck & Equipment team at
heavyequipment@duckercarlisle.com

About Ducker Carlisle

Named one of America's Top Management Consulting Firms 2026 by Business Insider, Ducker Carlisle is a global market research, strategy consulting and M&A advisory firm that helps the world's largest companies and private equity firms optimize business performance and accelerate growth. Founded in 1961 with offices across the US, Germany, France, UK, India and China, the firm leverages proprietary data, deep industry knowledge and proven methodologies to deliver tailored, industry-specific insights and recommendations across the automotive, heavy truck & equipment, general industrial, building and construction, and private equity sectors.

For more information, visit DuckerCarlisle.com | [LinkedIn](#)



Corporate headquarters:

1250 Maplelawn Drive
Troy, MI 48084

+1.800.929.0086

This document has been prepared by DC.

The contents of this document do not constitute any form of commitment or recommendation on the part of DC at the date of their preparation.

© Ducker Carlisle LLC 2026.

All rights reserved.

No part of this documentation may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise without the written permission of Ducker Carlisle.