



Reducing Upstream “Cherry Picking” through Accurate, Scientific Floor Pricing

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Introduction

Consignors often price upstream/online channels at a premium to protect against the downside of under-valuing vehicles. As a result, buyers “cherry-pick” the “better” vehicles (i.e. cars worth the premium) from upstream/online channels, and only the “worse” vehicles are left for physical auctions.

To address “cherry-picking”, our team of data scientists developed a statistically-driven, VIN-specific, wholesale valuation model – based on the Manheim Market Report (MMR) and vehicle odometer, damage, content, and exterior color. We used this model to set floor prices on a consignor’s upstream/online portfolio and tracked performance of both sales and no-sales that later sold at Manheim.

Compared to the consignor’s own floors, scientific floors reduced upstream/online “cherry-picking” and improved retention in all channels.

Through its Pricing Optimization service, RMS Automotive provides clients with scientific floor prices that drive improved performance across online and physical auction channels

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Consignor Benefits from Reduced “Cherry Picking”



Increased
Upstream/Online
Sales



Improved
Financial
Performance



New Buyers in
Each Channel

Summary of Findings

- ❑ Using their own floor prices, the **consignor** sold “**better**” vehicles (low-damage / high-content) **upstream/online** and “**worse**” vehicles (high-damage / low-content) **in-lane** ... due to “**cherry-picking**”
- ❑ Using our scientific floor prices, the consignor sold a more **even mix** of vehicles across channels
- ❑ At the same time, cars with scientific floor prices **achieved higher price retention** in all channels

Methodology

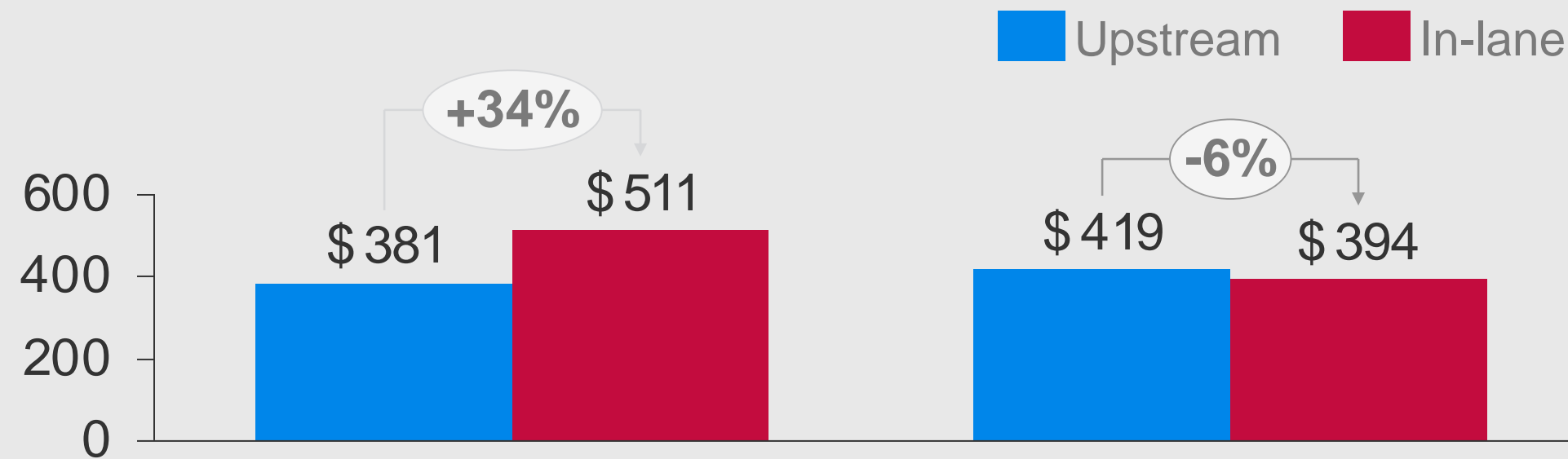
- ❑ For a period of several weeks, RMS Automotive (a Cox Automotive company) set scientific floor prices for 50% of a consignor’s upstream/online portfolio, and the consignor set floor prices for the other 50%
- ❑ During this period, RMS and the consignor each set floor prices for more than 1,000 unique VINs
- ❑ We tracked performance of both sales in this upstream/online channel and also no-sales that subsequently sold at a Manheim physical auction within a few weeks
- ❑ In order to capture the cost of depreciation, price retention was measured as the sale price compared to MMR on the first date the vehicle was offered upstream/online

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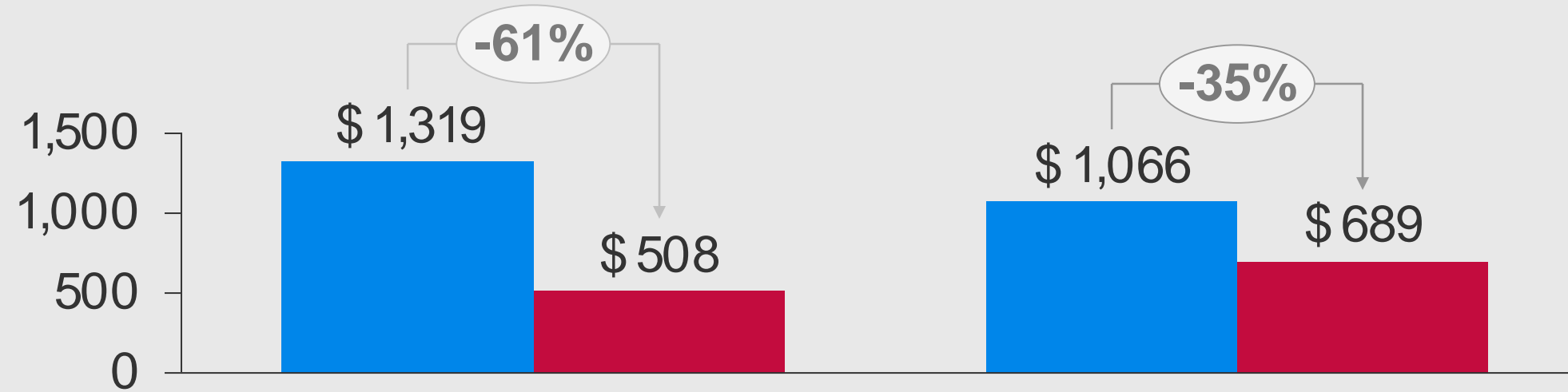
Scientific Floors Even Mix Across Channels and Drive Higher Retention



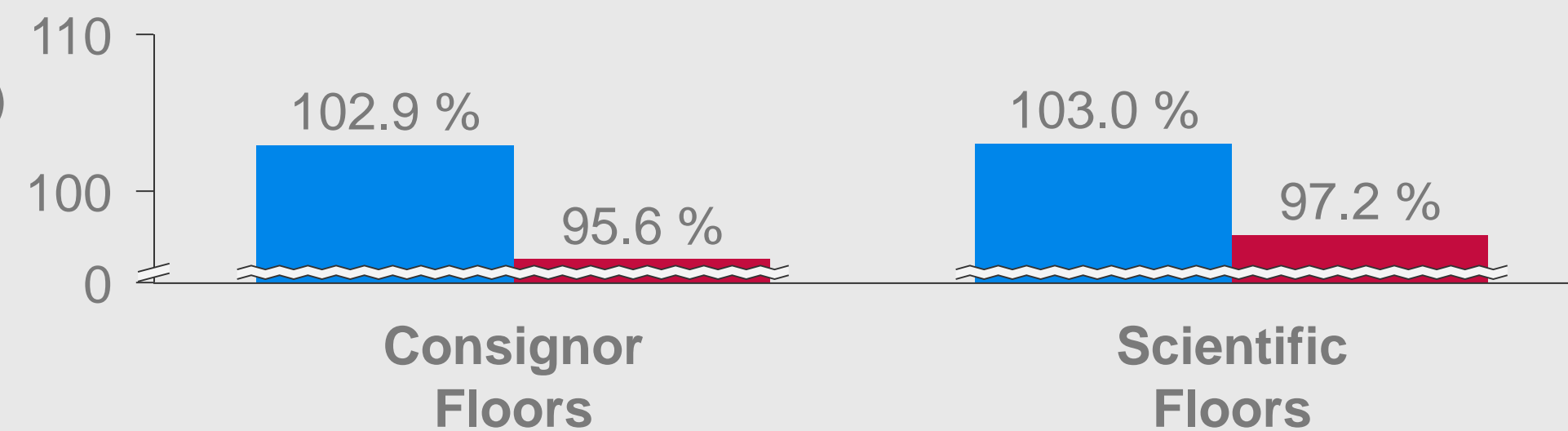
Avg. Vehicle Damage (\$)



Avg. MSRP Above base MSRP (\$)



Avg. MMR Retention (%)



(A) and (B), left side: When the consignor used its own floor prices, upstream buyers “cherry-picked” the “better” (i.e. low-damage / high-content) vehicles, leaving the “worse” ones to be sold in-lane.

(A) and (B), right side: When using scientific floor prices, a more even mix of vehicle conditions and content were sold across channels.

(C), both sides: At the same time, scientific floor prices achieved higher price retentions than consignor floor prices in both channels.

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Meet the Authors



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As Sr. Director of Insights & Optimization, Ben Flusberg leads a team of analysts, data scientists, and product development specialists who combine data science with actionable insights to help clients make optimal remarketing decisions that drive faster sales while maximizing returns.

Ben has 20 years of experience in technology and business innovation, data insights, and financial analysis. He earned his BA in Physics from Harvard University and his PhD in Applied Physics from Stanford University. Prior to Cox Auto, he worked at The Boston Consulting Group and at a Silicon Valley technology startup.

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Data Scientist

As a Data Scientist at Cox Automotive, Daniel Brasuell is a part of the Cox Automotive Data Solutions team, that focuses on the RMS Automotive pricing optimization projects.

Daniel joined Cox Automotive in 2013 and has over five years of data science experience. He earned his B.S. in Statistics from the University of Georgia and completed his M.S. in Applied Statistics at Kennesaw State University.

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As a Data Scientist at Cox Automotive, Paul is a part of the Cox Automotive Data Solutions team that focuses on wholesale valuations and implementation of optimization products for large wholesale consignors.

Paul joined Cox Automotive in 2012 and has nearly ten years of experience in data science. He earned his bachelor's degree in Mathematics and a Masters degree in Applied Statistics from Kennesaw State University.

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Transacting vehicles in multiple countries and growing, RMS Automotive, a Cox Automotive Brand, delivers a global enterprise software solution that enables its' commercial clients to manage their portfolio(s) across the complete vehicle lifecycle from new car build to used car sale. Through automation and data science, RMS Automotive provides VIN-specific recommendations for accurate vehicle pricing, as well as optimal reconditioning and inventory distribution. These services deliver real-time integration with a client's platform, faster remarketing time, reduced depreciation, cost of capital, improved residuals and reduction in wholesale losses. For more information about RMS Automotive, visit www.rmsautomotive.com or <http://rmsautomotive.eu>



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