

Shawn Kenney



CollisionLink Redesign

Research Strategy Design Leadership

Introduction

When a car that has been in an accident gets repaired, an estimate of the work is put together by a collision repair facility. Once upon a time, those estimates would be faxed to all the entities the facility would need to source parts from. One of these entities would be a local OEM dealership, while the rest would be aftermarket suppliers. The only difference between the fax that each entity would receive was that the parts intended for the other suppliers would be crossed out with a large black marker, obscuring the data.

The first product OEC introduced to the market upon its formation was called "CollisionLink." CollisionLink was designed to allow collision facilities to send their orders electronically to a dealership parts department, thus exposing the aftermarket parts needed in the process.

Generally speaking, OEM parts fit better than aftermarket parts. Mechanics prefer to work with OEM parts due to the time savings for fitment, as long as the price is right. With CollisionLink, OEMs could electronically flag parts that made sense to provide additional price incentives (rebates) for, giving dealerships the ability to compete on the part at a lower price point.

However, after nine years, the approach was struggling to gain the adoption the company had hoped for.



Process

During my interview, I was asked to conduct an on-the-spot heuristic review of the product, identifying several questionable design decisions that could serve as starting points for improvement.

Once I officially started the job, I learned that our product managers had already begun meeting with customers in the field to understand their dissatisfaction with the product. Our project team then met daily to evaluate the design based on this field research. I created wireframes based on our discussions, and we would evaluate them again the next day. After completing our work on the order overview screen, we moved on to the more complex challenge of redesigning the order details screen (see right).

The legacy approach organized the parts for an order into the following tabs:

- **Shop Requests:** Parts intended to be fulfilled by the dealership.
- **Upsell Opportunities:** Parts intended to be provided by an aftermarket seller.
- **Order Summary:** The final list of parts that will be sold by the dealership.

The screenshot shows the CollisionLink software interface. The main window is titled 'Shop Request' and contains a table of parts. The table has columns for Line #, Part #, Valid Request Type, Q, Estimate, Dealer, OE List, Shop Cost, Response, Qty Ful., Net Shop Cost, Avail. Date, and Invoice/Quote. The table contains four rows of data, each with a checkbox and a 'Part Status' dropdown menu. The interface also includes a left sidebar with tabs for 'Order Information', 'VIN Details', and 'My Notes'. The top navigation bar includes buttons for 'Part Corrections', 'Photos', 'Quick Print', 'Print', 'Copy to Clipboard', 'Legend', 'Locate', 'Add Trading Partner', 'Process Returns', and 'View Returns'. Several callout boxes are overlaid on the interface, pointing to specific elements:

- Reduce Uncertainty:** Points to the 'Quick Print' button. Text: "What is a 'quick print'? Why would I ever want to print slowly?"
- Accommodation:** Points to the 'Print' button. Text: "If this is the first task a parts department should conduct, why does it display as a secondary view?"
- Meaningful Grouping:** Points to the 'Part Status' dropdown menu. Text: "No clear logic to the order or actions, or relatedness between them."
- Simplicity:** Points to the 'Part Status' dropdown menu. Text: "What value are icons providing, particularly for actions that use the same icon?"
- Extraneous Information:** Points to the 'My Notes' section. Text: "There is a role for this information, but was pinning it to the left side of the display the best use of space?"
- Linguistic Clarity:** Points to the 'Part Status' dropdown menu. Text: "Are we really trying to 'upsell' customers? What need would they have for being 'upsold'?"

Early Iterations

Our theory was that by hiding “Upsell” opportunities in a secondary tab, users weren’t seeing them. Our feature-tracking data supported this theory. Initially, we explored a wizard in early concepts to guide users through the process, but as we progressed, we established a new approach that aligned with the users’ mental model. The model was as follows:

1. Immediately review aftermarket “conversion” parts and call the buyer to offer OEM alternatives.
2. Review the OEM parts in the initial offer and validate that they are correct for the specific vehicle, based on its Vehicle Identification Number (VIN).
3. Once the parts have been verified and any modifications have been made, add them to the order and price them.
4. Send a reply back to the buyer with the parts that will be fulfilled on the order for final confirmation.

It’s critical for the dealer to ensure that customers are ordering the correct part. If the part is incorrect, the customer will send it back, leaving the dealer stuck with it. Until the part is verified, a dealer won’t sell it. And if a dealer won’t sell it, they don’t need to price it.

Use of Tabs

Tabs were repurposed to allow access to an un-altered copy of the original order.

Time Sensitive Tasks

Users need to act on aftermarket parts quickly, before after market suppliers fill the order. These were moved to the top of the order.

Original Request
Working Copy

Vin #: 3FAHP06Z57R108621

Conversion Opportunities (2 Remaining)

Line#	Part #	Description	Type	Qty Req	Promos	Est List	OE Part #	Valid	OE List	Dealer Cost	Reimburs \$	Net Shop Cost	
3	55-9012-3456	Front Bumper	AM	1	M	\$278.94	44-9012-3456	✓	\$298.16 \$275.45	\$156.18	\$10.00		Convert
7	55-9012-3456	Front Passenger Headlight Assembly	SALV	1	M	\$122.08	44-9012-3457	▼	\$140.96 \$125.59	\$72.59	\$20.00		Convert

OE Part Corrections (4 Remaining)

Line#	Part #	Valid	Description	Promos	New Part #	
2	55-7890-9876	✓	Ford Division Derivative Hood	M		Done
4	6E5Z1015B	▼	Wheel Assy - Spare With Mini Steel Spare Wheel Spare Wheel		6E5Z10142C	Done
5	41-3846-1942	✓	License Plate Assy with Mounting Brackets License Plate Holder	SF		Done
6	55-7890-7321	✗	Retractable Radio Antenna Antenna	M		Done

Response to Buyer (2 Total)

Line#	Part #	Est.List	Dealer Cost	OE List	Shop Cost	Qty Req	Qty Ful	Response	Status	Net Shop Cost	Invoice #	Avail. Date	
1	55-7890-9876	278.94	0.00	0.00	0.00	1	1	Invoice ▼	Available ▼	0.00			Remove
8	55-9012-3456	\$4.99 \$4.49	0.00	0.00	0.00	1	1	Invoice ▼	Available ▼	0.00			Remove

+ Click to Add Part

Pricing The Part

Until the part is verified, the user has no interest in pricing data. Once that’s done they can make any adjustments, and set its status..

Verifying the Part

Most vehicles have different trims. A part can’t be sold until they are sure the part matches the vehicle and trim.

Final Version

To validate our concept, I developed an interactive prototype in Flash and joined the product manager to present it to dealerships in the Indianapolis market. The first dealership we visited was so frustrated with the current version of CollisionLink that they initially asked us to leave. After some shrewd negotiation with the parts manager, we were given permission to speak to one of their employees for five minutes. We placed the prototype in front of them and asked them to describe what they were seeing. Within five minutes, we had a circle of staff gathered around, including the parts manager. After an hour of Q&A, they were ready to become a beta tester.

Feedback from the remainder of our "road tour" was also overwhelmingly positive. One key insight was that having unaltered access to the original order wasn't mission-critical, but managing multiple orders was. This feedback gave us the opportunity to revise our tab strategy to support working across orders, and later, across products as our redesign efforts progressed.

The screenshot shows the CollisionLink web application interface. At the top, there are navigation tabs for 'HOME' and 'CollisionLink'. Below this, the user is logged in as '2007 Cobalt'. The main content area displays order details for VIN 1G1AL58F877253398, including a table of 'Conversion Opportunities (3 Remaining)' and 'Buyer Requests (3 Remaining)'. A red bar at the bottom of the table shows a subtotal: \$221.20, \$351.62, \$178.17, \$103.13, \$351.62, and \$264.32. Callouts point to various UI elements: 'Optimizing Tabs' points to the top navigation; 'Summarized Data' points to the top summary bar; 'Improved Clarity' points to the action icons in the table; and 'Later Enhancements' points to the red subtotal bar.

Optimizing Tabs

Tabs were updated to allow users to move between applications and multiple orders they may be working at the same time.

Summarized Data

The high-level details necessary to manage an order were placed on top. Anything else was accessible from an action.

Improved Clarity

Actions were rearranged based on logical order that they would be used when processing an order.

Later Enhancements

Subtotals were a later enhancement made to assist in the pricing effort.

Summary

When we rolled this out to our subscribers, we took an “all hands on deck” approach with our customer support staffing levels. The day this launched, the bulk of our calls were limited to subscribers that forgot their login credentials. Not only did this validate that our approach worked, but that if you make changes for the better customers will actually appreciate it.

Due in large part to this redesign, CollisionLink showed the strongest gains in the company in customer growth, OEM support, and the value of parts that moved through the system during my time at OEC. The design has had staying power as well. 16 years later the structure of the experience has remained intact.



Learn about our approach while at OEC from the Nielsen Norman Group

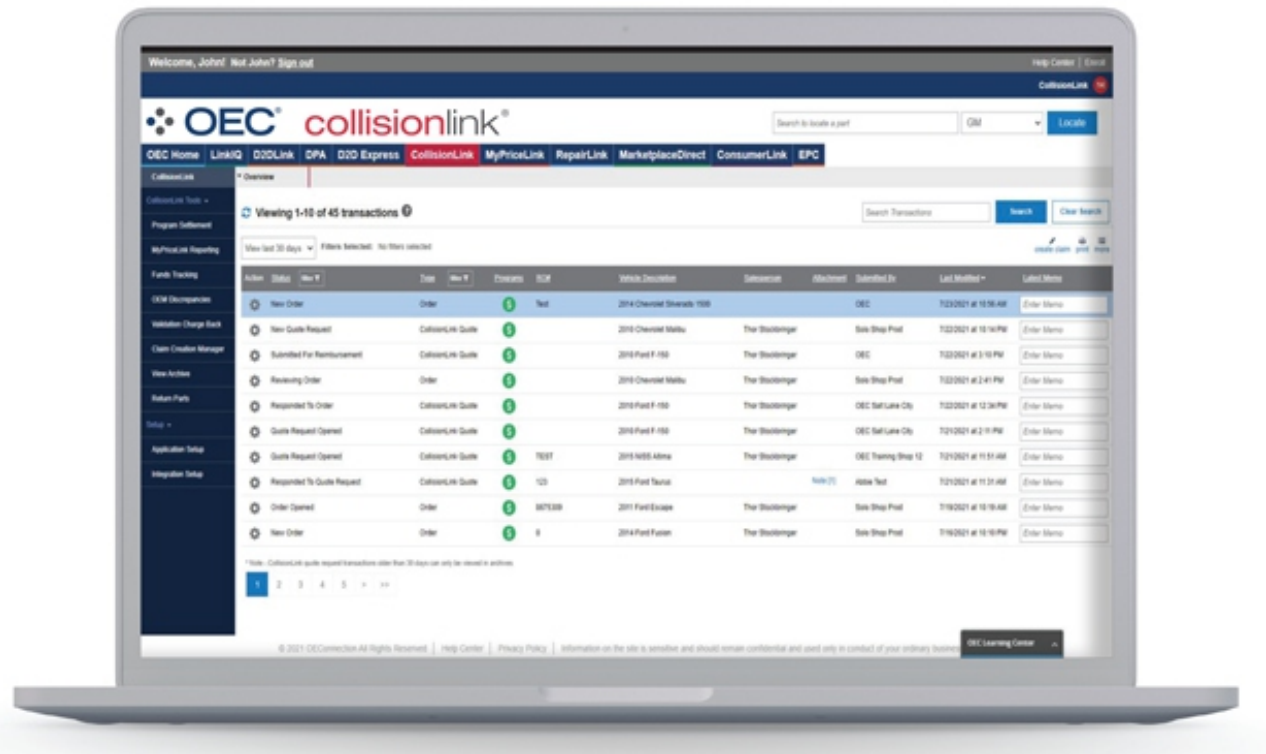


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