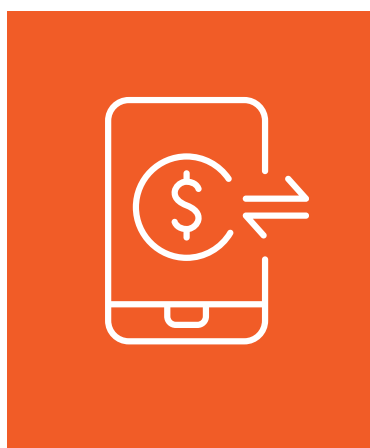
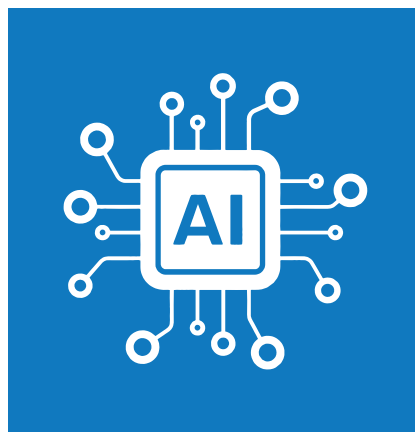


SPARE PARTS

ecommerce handbook

6 Steps to Streamlined Management that Boost Profits.





About CDS

CDS Visual is the #1 visualization software for manufacturers leading the digital business revolution for industries all over the world.

Whether you're an OEM or parts distributor, we will help you convert browsers into buyers while reducing engineering costs. We deliver measurable results for our clients, resulting in more sales and more satisfied customers.

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02 Current Landscape

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Executive Summary

Aftermarket Sales Strategy is Key to Maintaining and Improving Profitability

Until recently, many original equipment manufacturers (OEMs) treated the aftermarket as an afterthought. In the wake of supply chain disruptions, high-interest rate burdens, and COVID-19-driven disruptions, manufacturers in B2C companies (such as carmakers) have focused on aftermarket sales as a growth driver. This is especially significant at a time of high interest rates when equipment orders are disrupted and capital spending comes into question.

Other B2B firms (such as manufacturers of industrial and durable goods) have learned how aftermarket services can be a critical component of the sales mix, with the potential to accelerate growth, improve profit margins, and strengthen customer relationships – all without a significant investment in capital expenditures.

Building a robust aftermarket offering has at least three major benefits. First, and most directly, it can provide a better customer experience for end users. When manufacturers enable maintenance service and replacement parts for a product they sell, customers can expect extended product life and improved product performance.

Providing aftermarket parts and services can also help manufacturers maintain relationships with customers throughout the lifetime of a product. This gives an avenue for the possibility of recurring revenue with minimal customer acquisition costs.

Finally, aftermarket offerings can provide shareholders with a cash flow increase and reduced risk. The margins from aftermarket offerings often reach higher margins for OEMs that have a clearly defined digital strategy.

“ Despite the growth potential of aftermarket sales, customer experience in part search capabilities is rudimentary. **Many original equipment manufacturers still use PDF catalogs, CAD files, digital product catalogs, and aftersales specialists** to drive sales and troubleshoot.



Aaron Smith

Vice President, Solutions Engineering
CDS Visual

Current Landscape

Changing customer expectations puts pressure on OEMs to adapt.

Customer expectations of how their dealers, OEMs, and vendors serve them have changed dramatically – customers want simpler, on-demand, omnichannel engagement that puts their needs first. They expect to have informed conversations with vendors and OEMs who can demonstrate expertise in their industry, product, and challenges.

EXHIBIT 1: Experiences Required for Customer Attention

Customers tend to want all five of these must-dos in combination



Many B2B manufacturers struggle to embrace a truly customer-centric mindset, which can start with the number of hours the post-sales team spends on the phone trying to assist customers who otherwise have a machine down potentially causing issues with the customer's bottom line.

Challenges & Barriers

Here is a short list of potential issues that can derail and prevent companies from achieving their growth success goals.

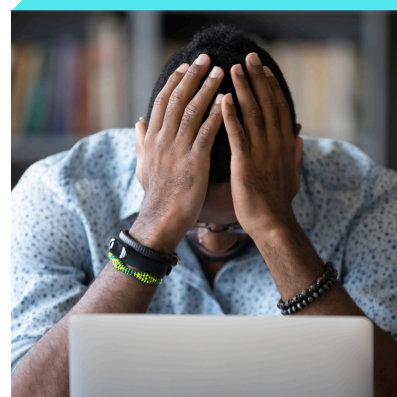
! CUSTOMER FRUSTRATIONS ARE STILL EXCESSIVE

While forward-thinking B2B manufacturers use part search technology to simplify the aftermarket process, some organizations fail to clean up or maintain their parts database, resulting in nonexistent and non-matched part numbers and poor customer experience.

This often results in excessive back-and-forth between the distributor and the OEMs, causing delays and frustration for the customer, especially when facing machine downtime. This is even more severe for customers with older machines from past designs whose part numbers follow a different nomenclature or are sourced from a different country.

! SERVICE TEAMS WASTE TIME TROUBLESHOOTING ISSUES

During machine uptime, every minute counts. The cost of doing business is the time spent troubleshooting equipment breakdowns. Aftermarket sales specialists are the last resort to getting machines back online after hours of troubleshooting by application engineers. The struggle can be found when trying to work with an after-sales specialist with inadequate information.



Challenges & Barriers

! POOR ECOMMERCE EXPERIENCE

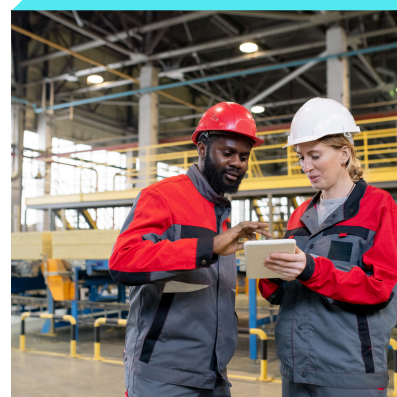
A customer's first place of research during equipment downtime is the OEM website. Consider the dilemma that a customer faces on an equipment manufacturing website. An application engineer performing routine maintenance on equipment in the field needs a part replacement. However, the part the field engineer is looking for has no part number nor does the OEM site have an exploded view of the machine for reference.

Instead, the OEM site has PDF copies of the parts catalog with no option to order by exact part number which can lead to more frustration and wasted time playing part detective with vendors and OEMs.

! MANUAL PROCESS WITH LITTLE TO NO INTEGRATIONS INTO SUPPLY CHAINS

Most executives want to provide a speedy solution for their customers but there are misalignments between supply chains and front-end teams. This is because planning and tracking aftermarket operations still happen on Excel sheets.

This means that part numbers are tracked in fragmented systems with little visibility into stock-keeping units leading to delays and miscommunication with distribution and delivery. This can lead to high operations costs for B2B customers.



AI-Enabled Part Search Technology to the Rescue

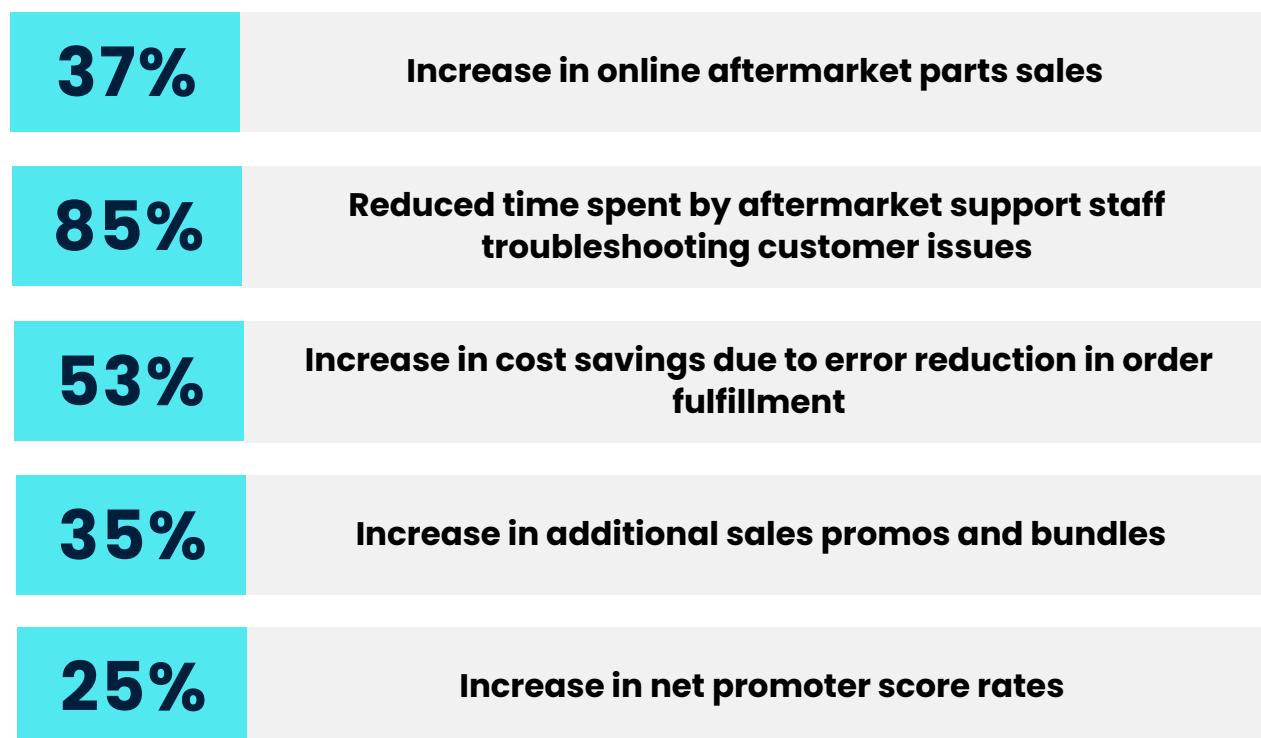
Enhance your aftermarket service business by automating the part search process

Artificial intelligence-powered part search can enhance the aftermarket parts business by automating the part search process with an integrated ERP, PLM, or CAD system. This provides a seamless search service that can empower customers to search, find, and add to their shopping cart on your eCommerce site.

Why CDS Partable™?

Partable™ provides an advanced part search for B2B aftermarket purchases. Users can find, select, and buy parts using interactive 3D models, 2D exploded view images, BOM navigation, and serial number search.

Customers who incorporate Partable into their aftermarket sales strategy have experienced significant benefits:



“ Digital tools are rapidly reshaping the aftermarket, offering new possibilities for efficiency, customer engagement, and revenue generation. Looking beyond operational efficiency, a strong aftermarket strategy has the potential to unlock significant profitable revenue.



Nick Thompson

Head of Product Portfolio & Marketing
CDS Visual

Aftermarket Parts Search is Bigger than the Sum of Its Parts

CDS Partable for AI-Powered Visual Parts Search

Partable™ is a cloud-based solution that provides interactive aftermarket product search and visualization leveraging existing engineering data. Here is a list of key features that power the aftermarket part search technology.

Partable Key Features

AI-Powered Visual Search

- **CAD View:** Explore CAD assets to identify the proper spare part.
- **BOM List View:** Use the original product bill of materials (BOM) to find parts
- **Interactive Hotspots:** 2D view with hotspots from engineering drawings
- **Interactive 3D View:** 3D views with hierarchical lists or assemblies

Smart Data Preparation

- **Embrace AI:** Use AI to simplify the process of mapping ERP and CAD or 2D drawing data for product history
- **Simplify and Speed up Data Preparation:** Partable AI uses state-of-the-art AI engines for object detection, image segmentation models for data extraction, and deep learning for semantic text matching and OCR models.

Seamless Integrations

- **Integrate with any ERP, PDM, or CAD System:** Item master from any ERP (Oracle, SAP, Infor, MS Dynamics), get product information from any PIM, and Engineering data from any CAD, PDM, or PLM system (PTC, Siemens, Autodesk, Solidworks, etc.).
- **Add to Cart and Buy:** Integrate with any e-Commerce Cart (Salesforce, SAP, Oracle, Intershop, etc.) to add the selected part to the current user cart and complete the purchase.

How CDS Partable is Boosting Margins and Improving Customer Experience for Environmental Solutions Group

Case Study: ESG Increases Self-Service Spare Part Orders 900% with CDS Partable

The Challenge: Slow, error-prone manual aftermarket order process for dealers and their customers to minimize equipment downtime and revenue loss.

The Solution: CDS Partable for integrated self-service replacement part search, selection, and ordering with 2D exploded view images with hotspots and interactive 3D models.

The Results: ESG explodes its aftermarket e-commerce business by increasing self-service online orders by 900% and revenue by 696%.



+900%

Self-service
Online Orders

+696%

Ecommerce
Revenue



We're looking more closely at patterns from our customers and how they order. Being able to provide our dealers with recommended stocking lists based on the latest historical order data helps them improve their fulfillment capabilities and keep customers' equipment running.

Dave Young
VP of Sales, Product Management, & Marketing
Environmental Solutions Group



“

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Dave Young

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Building a Coherent Aftermarket Strategy for Continued Success

Winning with Visual Spare Parts Search

Customers sometimes lack precise information about parts, even though they might know a general description or have a damaged part in hand but struggle to find an exact match. Parts often have multiple identifiers, from OEM numbers to aftermarket equivalents, which can create complexities when the customer is trying to search and verify that they have found the correct part before purchasing.



Visual Search Validates Purchases: Seeing is believing so give customers visual solutions to identify and buy parts.



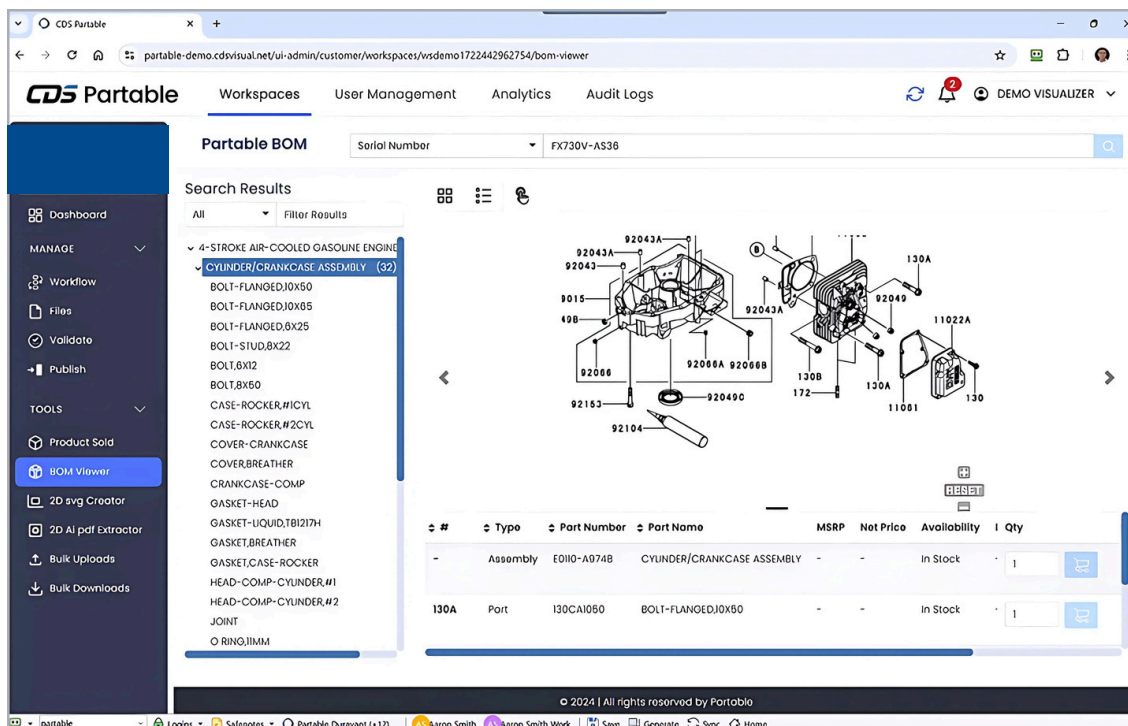
What You Can Do:

Leverage AI visual part search functionality to provide a CAD view and 2D and 3D view of the part right through the phone. Provide an add-to-cart option to speed up the checkout process with the click of a button.

Building a Coherent Aftermarket Strategy for Continued Success

Clean Parts Data Eliminates Customer Frustration

Without a reliable search function on your website, end users can become frustrated and abandon their carts or call a service representative, leading to lost sales, damaged brand reputation, and high customer service costs. The urgency of deploying a well-implemented visual search solution is clear. It empowers customers to find the parts they need quickly and easily, driving a more profitable aftermarket part business through self-service e-commerce sales and fostering customer trust and loyalty. Free the hands of aftermarket sales technicians to provide delightful services to otherwise hard-pressed customers who need to get their machines back online.



The screenshot shows the CDS Partable BOM viewer interface. The search results list includes:

- 4-STROKE AIR-COOLED GASOLINE ENGINE
- CYLINDER/CRANKCASE ASSEMBLY (32)**
- BOLT-FLANGED,10X60
- BOLT-FLANGED,10X65
- BOLT-FLANGED,6X25
- BOLT-STUD,8X22
- BOLT,8X12
- BOLT,8X60
- CASE-ROCKER,#1CYL
- CASE-ROCKER,#2CYL
- COVER-CRANKCASE
- COVER,BREATHER
- CRANKCASE-COMP
- GASKET-HEAD
- GASKET-LIQUID,TB1217H
- GASKET,BREATHER
- GASKET,CASE-ROCKER
- HEAD-COMP-CYLINDER,#1
- HEAD-COMP-CYLINDER,#2
- JOINT
- O RING,11MM

The 3D exploded view shows various parts labeled with numbers like 92043A, 92042, 9015, 108, 92066, 92163, 92104, 92068A, 92068B, 92049, 130A, 11022A, 130B, 172, 130A, 11001, and 130.

| # | Type | Part Number | Part Name | MSRP | Net Price | Availability | Qty |
|------|----------|-------------|-----------------------------|------|-----------|--------------|-----|
| - | Assembly | E010-A074B | CYLINDER/CRANKCASE ASSEMBLY | - | - | In Stock | 1 |
| 130A | Part | 130CA1050 | BOLT-FLANGED,10X60 | - | - | In Stock | 1 |

AI-Powered Data Clean-Up: Use AI to help clean and optimize all of your part data for improved search.



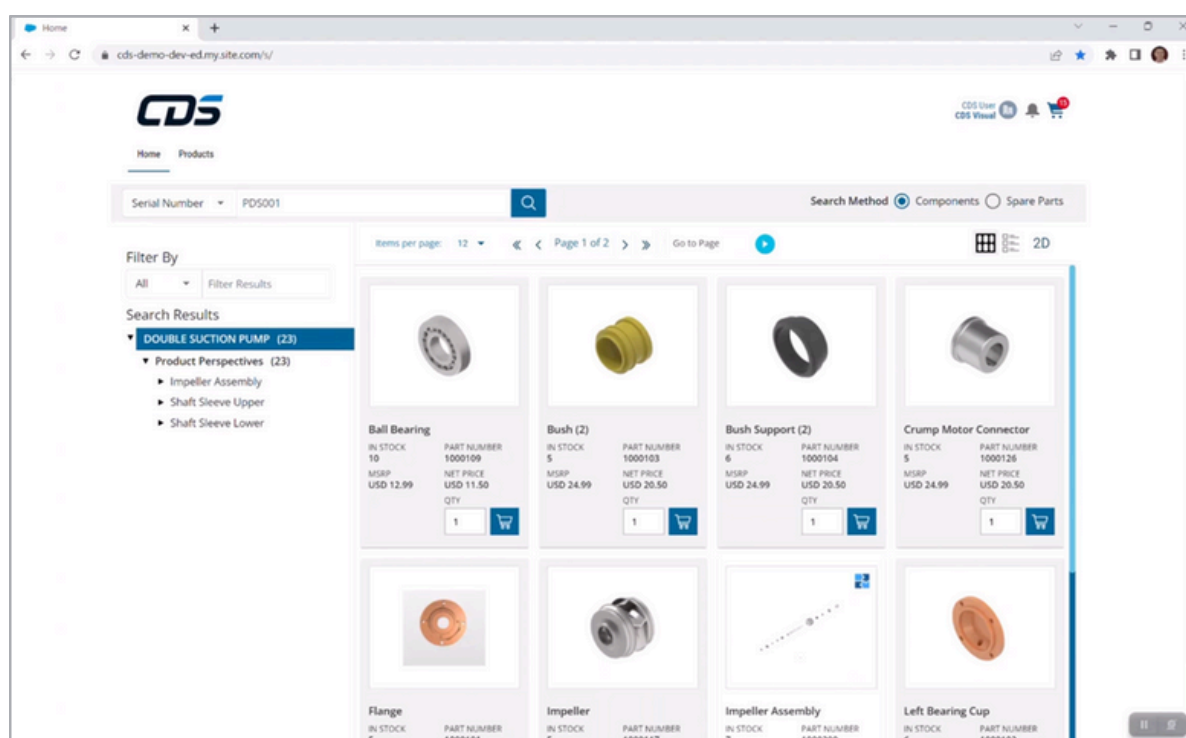
What You Can Do:

AI-powered data clean-up and optimization can help quickly align parts data to implement a search-and-buy solution for the aftermarket part business.

Building a Coherent Aftermarket Strategy for Continued Success

Build Confidence via AI-Assisted Advanced Parts Search with Exploded Views

Simplify part identification for your customers by incorporating advanced AI-assisted search functionalities. When customers need a replacement part but lack the exact part number or clear identification, they often resort to time-consuming calls and searches. The digital representation shows how products are assembled, highlighting the specific individual parts and their relationships within the larger assembly, significantly improving part identification and reducing frustration.



2D and 3D Exploded Views: Explode product assemblies to visually explore and view every part.



What You Can Do:

Implement a solution that utilizes CAD-based exploded views enabling customers to visually explore and identify the parts they need while receiving assistance from AI when needed.

Building a Coherent Aftermarket Strategy for Continued Success

Single Source of Information for All BOMs

Maintaining a single, accurate, and up-to-date source of information for Bills of Materials (BOMs) is essential. Discrepancies in BOMs across different systems and use cases can lead to confusion and inefficiencies. Streamlined BOM management can enable a cleaner part search process that helps accelerate sales and enhances customer success.

The screenshot displays a software interface for managing Bills of Materials (BOMs). At the top, there are navigation options like 'Navigator', 'Commander', and 'Browse Part Diagrams'. A search bar is present with 'Part Number' and 'Keyword' tabs. The main section is titled 'Portable BOM' and shows a search for 'BASE.315D15B3D4'. On the left, a 'Search Results' sidebar lists various categories like 'AIR SCHEMATIC - BART', 'SCHEMATIC - T4F CMNDR BART 22', and 'ASSY - ABS MODULATED VALVE (7)'. The central area features a 3D exploded view of a mechanical assembly. Below this, a table lists the components:

| # | Part Number | Part Name | MSRP | Net Price | Quantity Used | |
|---|-------------|------------------------------|----------|-----------|---------------|---|
| - | 028-090421 | ASSY - ABS MODULATED VALVE | USD 0.00 | USD 0.00 | 0 | 1 |
| 1 | 843-046976 | VALVE - ABS MODULATED 2 PORT | USD 0.00 | USD 0.00 | 0 | 1 |
| 2 | 300-048994 | FITTING - STR * 2708-1N-R-R | USD 0.00 | USD 0.00 | 0 | 1 |

Streamline BOMs Management: Eliminate discrepancies across all of your BOMs use cases.



What You Can Do:

Utilizing a unified BOM management system ensures all departments, engineering, and manufacturing—have access to accurate and consistent information.

Building a Coherent Aftermarket Strategy for Continued Success

AI-Powered Image Search: Snap a Picture, Find Your Part

Innovate your parts identification process with AI-powered image search. Image search technology, popularized by platforms like Amazon and Google, allows customers to snap a photo of the required part using their smartphone camera and upload it to your solution. The AI engine analyzes the image and recommends the potential matches, significantly reducing the need for manual part number searches.

AI image search makes everyone a part expert no matter their knowledge or experience. When integrated into an eCommerce system, customers can snap a picture, identify the part, add to cart, and confidently make a purchase.



AI Image Search: Make anyone a parts ID expert.



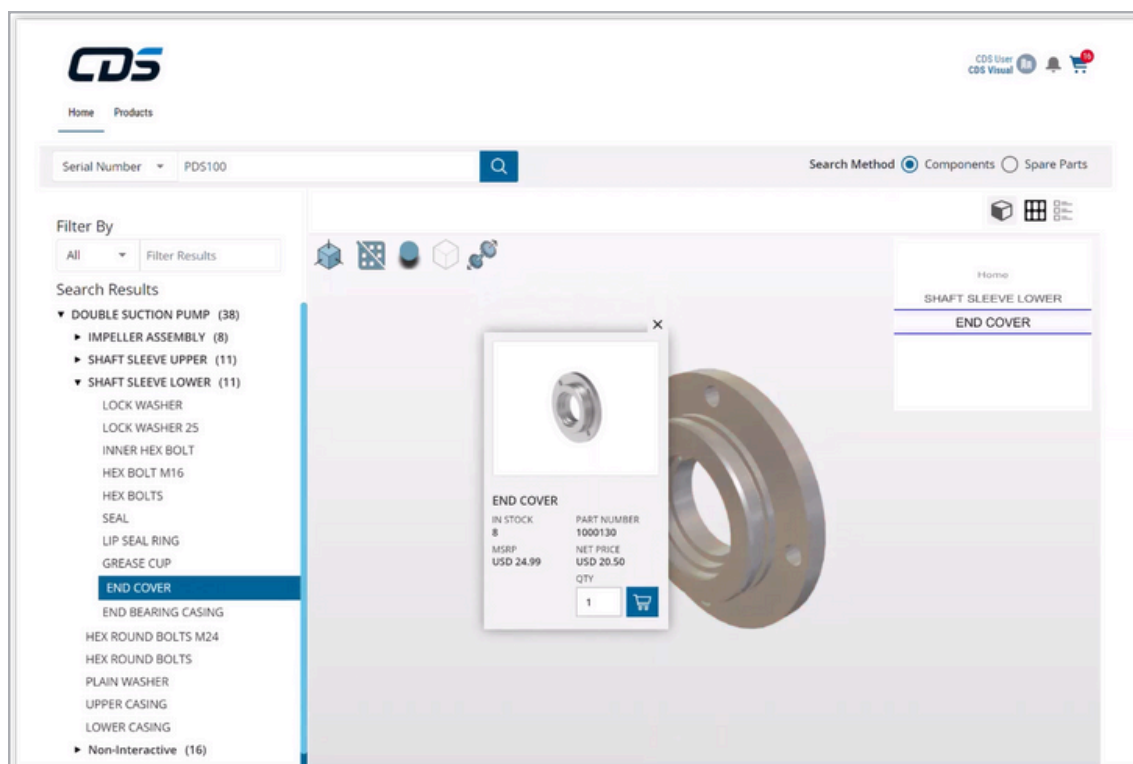
What You Can Do:

Leveraging the AI-image search feature enhances efficiency and provides a modern, user-friendly experience that users have become familiar with in their daily lives.

Building a Coherent Aftermarket Strategy for Continued Success

Seamless Integration into Ecommerce Platforms

Your customers expect a seamless online buying experience like their shopping habits. Integrating your aftermarket parts business with a robust e-commerce platform allows customers to easily search, view details, and purchase parts directly from your webshop. The integration streamlines the ordering process, reduces manual intervention, and improves overall customer satisfaction.



Ecommerce Integration: Give your customers the ability to identify and buy spare parts through self-service ecommerce.



What You Can Do:

Integrating with platforms like Salesforce Commerce Cloud or Intershop offers powerful solutions for enabling visual representation and direct purchasing of aftermarket parts while giving your customers a robust client portal and buying experience to drive low-touch revenue.

Conclusion: Invest in Search for Your Aftermarket Business

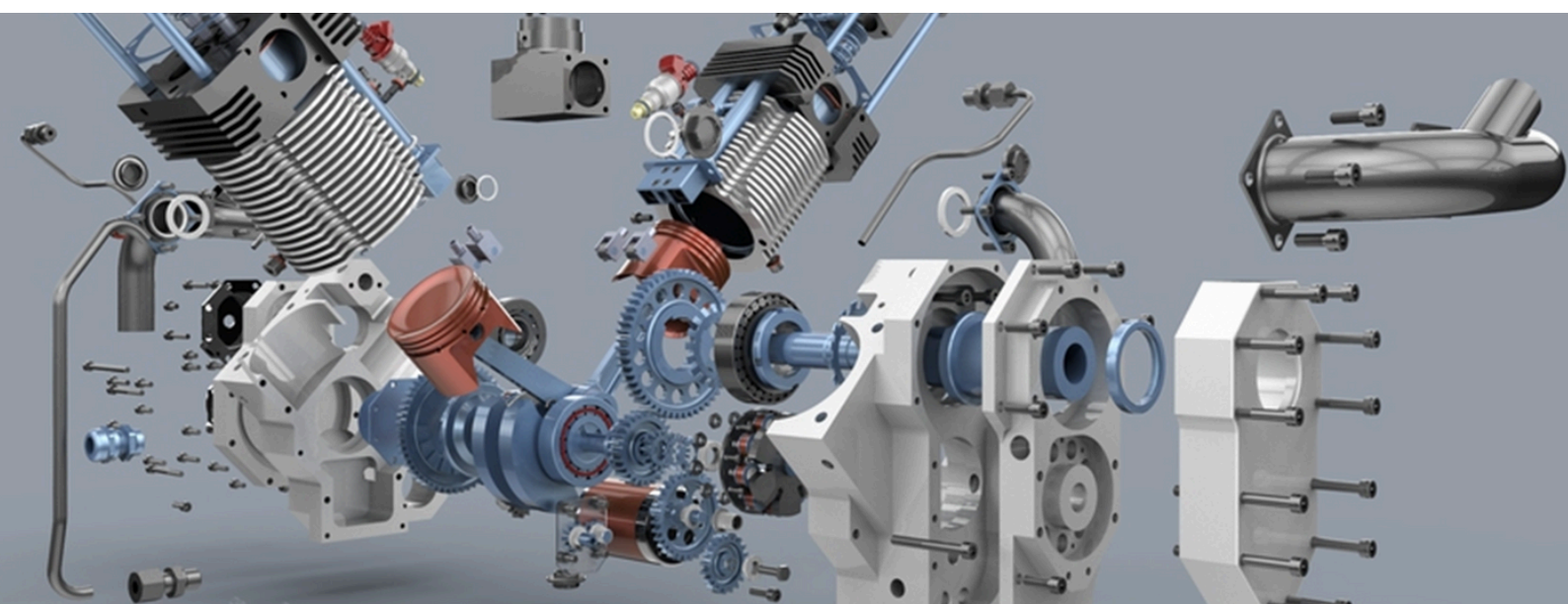
The Aftermarket Parts Business is an Essential Investment

A robust aftermarket parts business should not be considered a luxury but an essential investment.

By providing value-added digital-first aftermarket part support, manufacturers can increase customer lifetime value and create new profitable revenue streams. The shift towards long-term partnerships with customers is a promising sign of the industry's future, instilling optimism for reliable revenue.

Don't let outdated parts management systems hinder your progress. Invest in AI-enabled digital solutions as an investment into your aftermarket part business and experience the rewards of a satisfied customer base and a thriving B2B operation.

Request a [customized demo](#) of the CDS Partable solution today.



Resources

<https://www.mckinsey.com/industries/industrials-and-electronics/our-insights/aftermarket-sales-and-service-are-vital-to-manufacturers-strategies>

<https://www.aftermarketnews.com/deloitte-transforming-manufacturing-in-the-wake-of-covid-19-pandemic/>

[Four Practical Use Cases for an AI Aftermarket Business that Improves Operations and Increases Profitability - CDS Visual](#)

[5 Benefits of AI-Powered Image Search for Your Aftermarket Business - CDS Visual](#)

[Why AI-Powered Data Optimization is the Key to Success for Your Aftermarket Spare Parts Business - CDS Visual](#)

[The Top Five Key Competitive Advantages You Gain by Digitizing Your Aftermarket Parts Business - CDS Visual](#)

20+ years of experience helping industrial manufacturers optimize their aftermarket business.