

Information Analytics

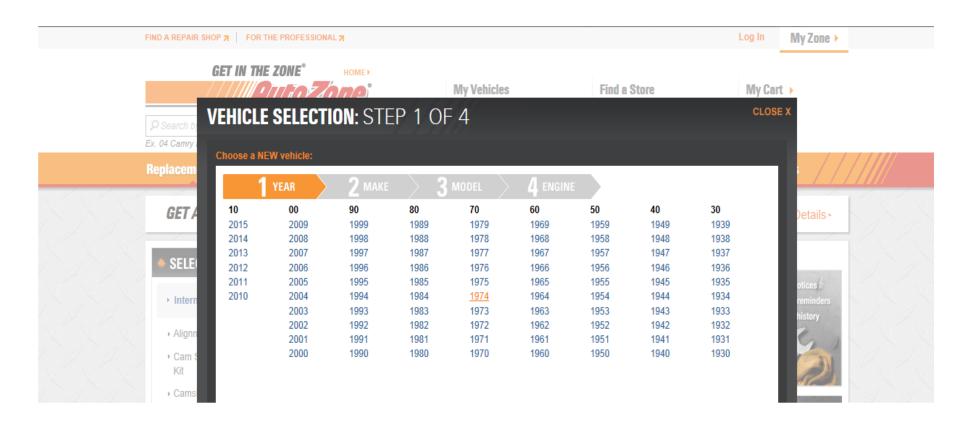


Caterpillar Confidential : Yellow INFO: INSIGHT: ACTION: VALUE



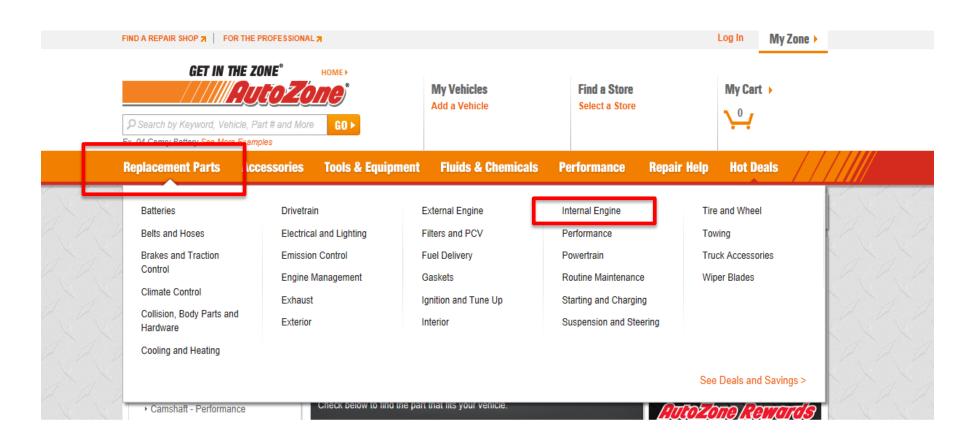
- What can we learn from competitors?
- What is current Parts.Cat.Com data telling us?
- What analysis can be done to gain insight?
- What action steps can be taken with new knowledge?

COMPETITOR COMPARISON



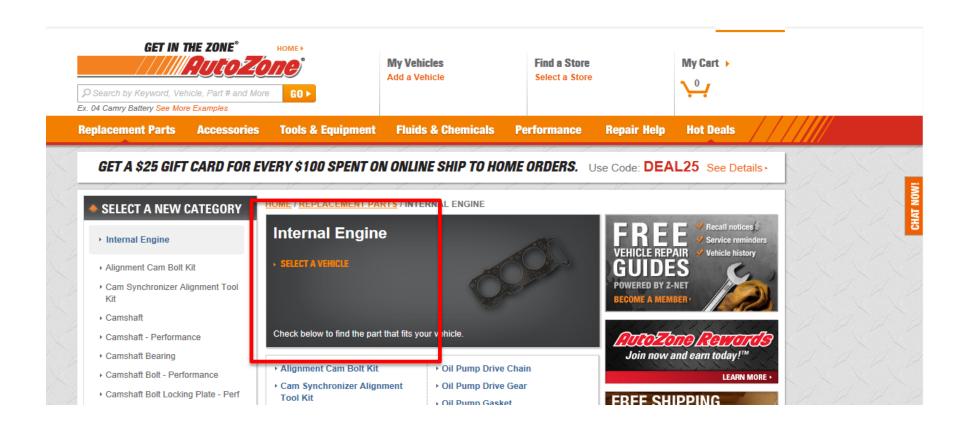


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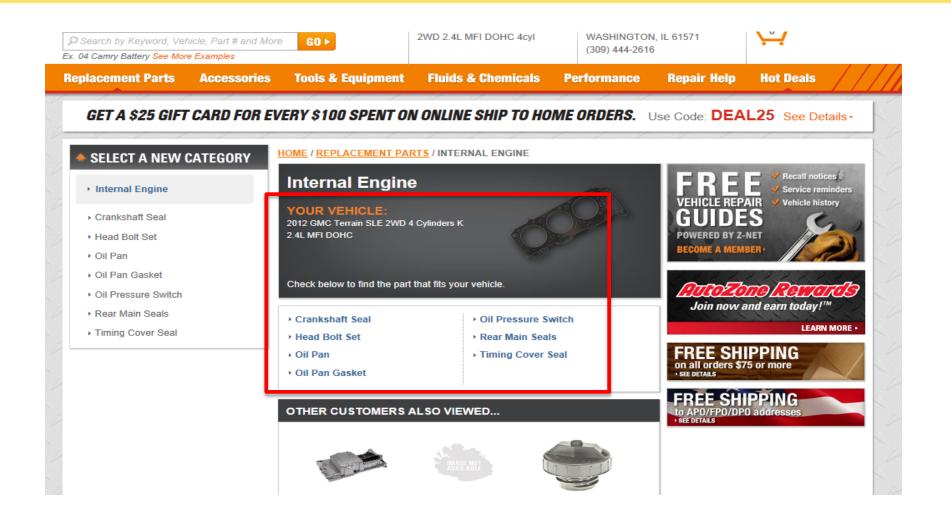




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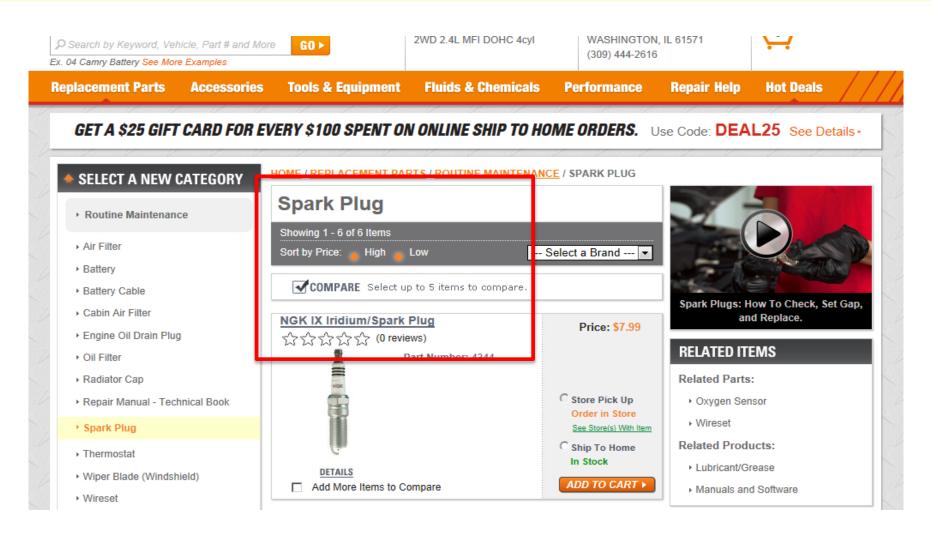








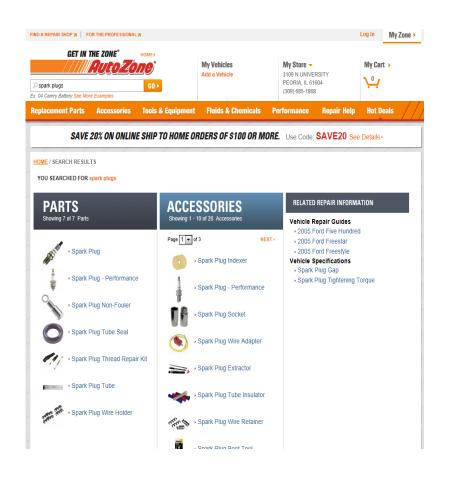
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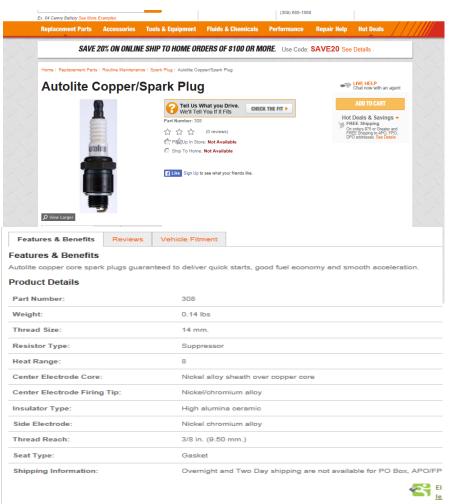


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Competitor Comparison – AutoZone

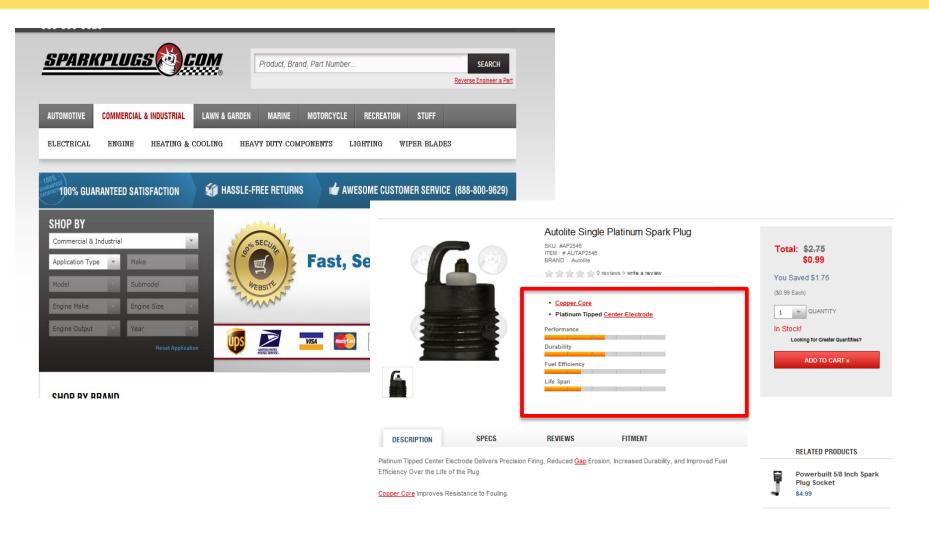






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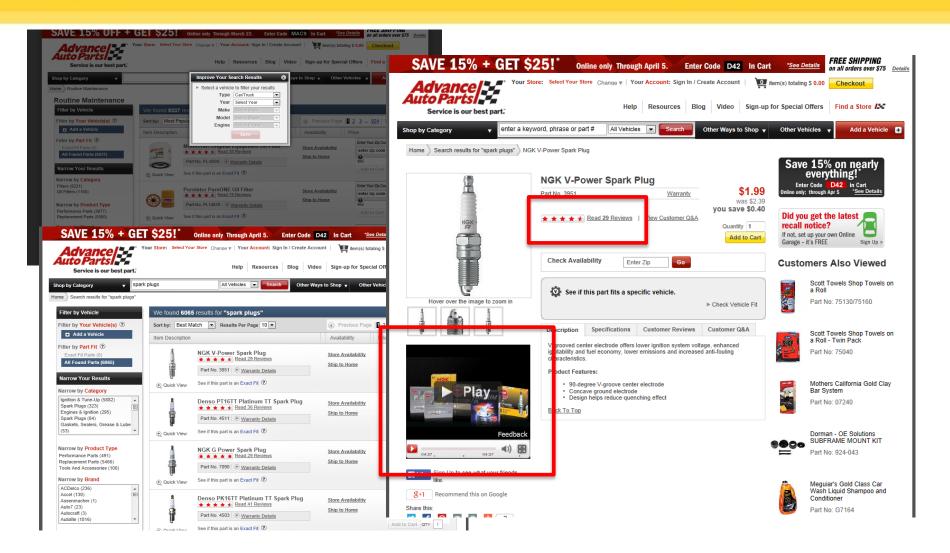
Competitor Comparison – SPARKPLUGS.COM





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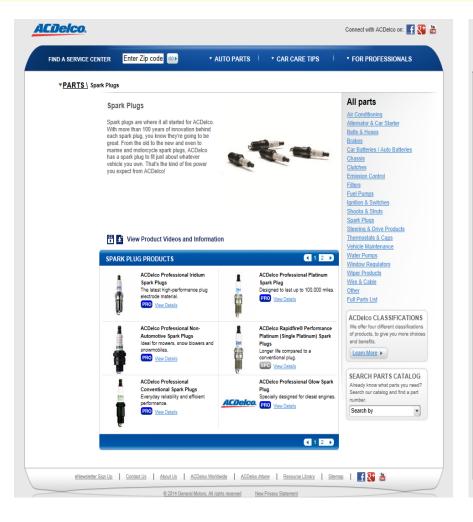
Competitor Comparison – Advance Auto Parts

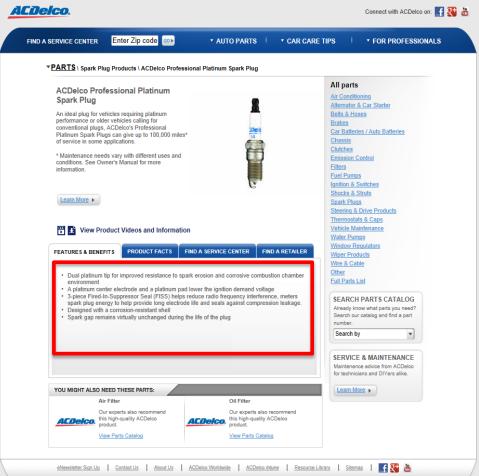




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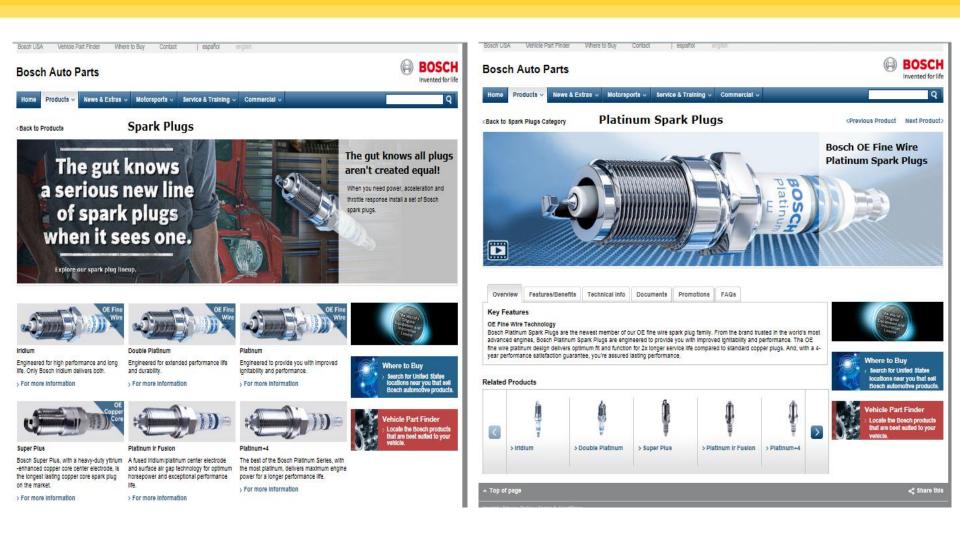
Competitor Comparison – AC Delco







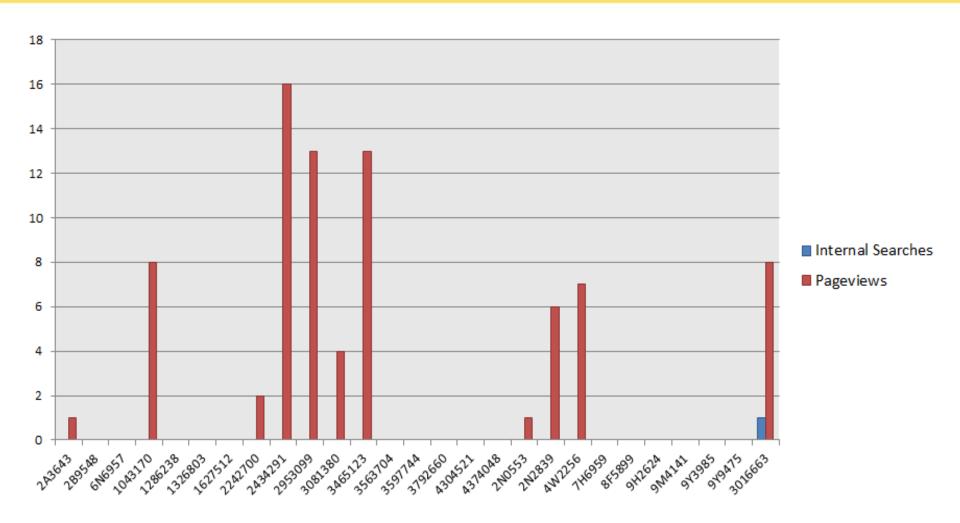
Competitor Comparison – Bosch Auto Parts





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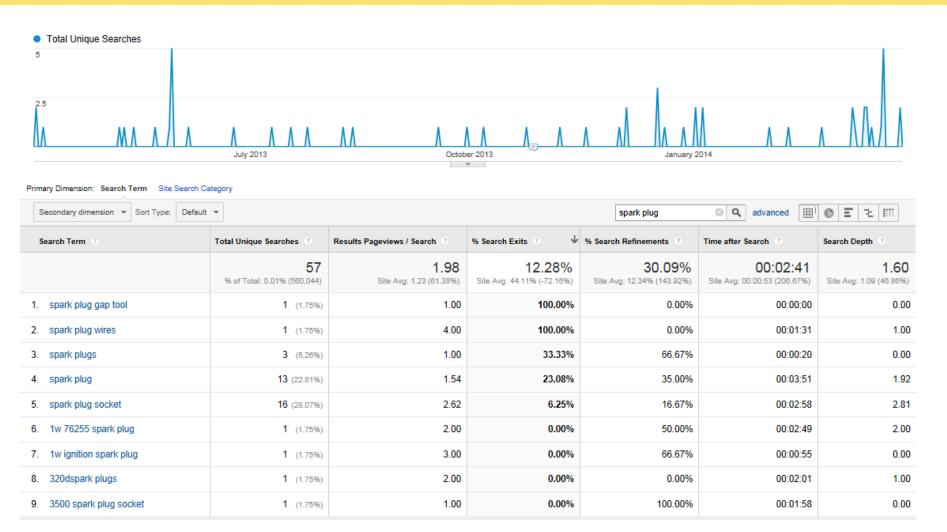
2014 Spark Plug Parts.Cat.Com Traffic – 27 Part Numbers





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Current Parts.Cat.Com Internal Search Activity

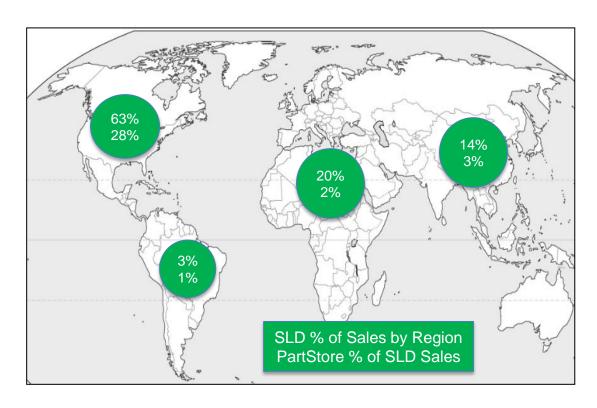


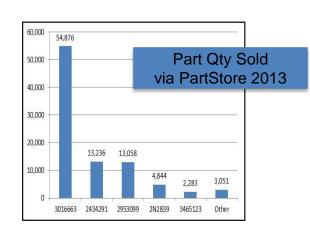


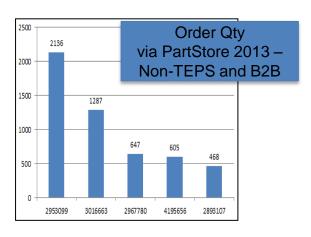
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SPARK PLUG SALES INSIGHTS

	2009	2010	2011	2012	2013
WW Sales (SLD)	\$ 26,978,452	\$ 29,905,678	\$31,094,430	\$32,075,653	\$ 31,387,047
PartStore %	14%	13%	14%	16%	18%







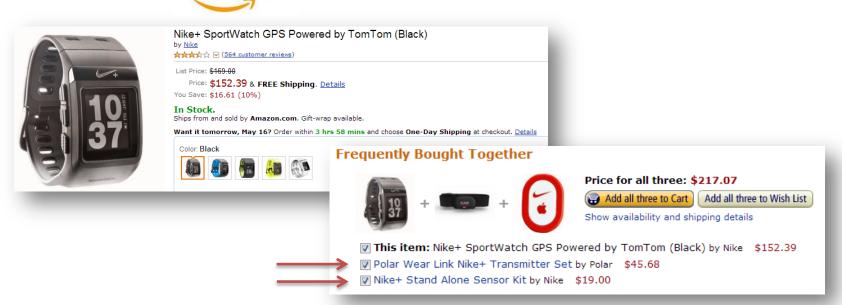
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WHAT IS MARKET BASKET (AFFINITY) ANALYSIS

- What items do customers buy together?
- Enables cross-selling opportunities

amazon

Example:

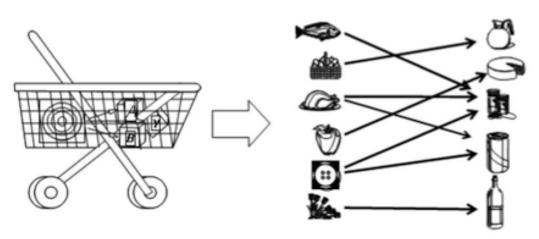




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DATA BACKGROUND

MARKET BASKET ANALYSIS



98% of people who purchased items A and B also purchased item C

- Pulled 2009-2013 PartStore transactions
- Limited to transactions which contained at least one of the 27 spark plug part numbers
- Filtered out all TEPS and B2B customers



OVERALL RESULTS

Shopping For Part/Parts (#) > Suggested Part	Shopping for Part/Parts(Name) > Suggested Part	Support	Confidence
{1251372,1R0726,3016663} => {1352651}	(O-Ring, Oil Filter, Spark Plug)> Seal	6.0%	99.2%
{1R0726,2262779} => {3016663}	(Oil Filter, Engine Air Filter)> Spark Plug	5.4%	98.3%
{1251372,1R0726} => {1352651}	(O-Ring, Oil Filter)> Seal	6.2%	97.8%
{1251372,1352651,1R0726} => {3016663}	(O-ring, Seal, Oil Filter)> Spark Plug	6.0%	97.0%
{1352651,1R0726} => {3016663}	(Seal, Oil Filter)> Spark Plug	6.3%	96.7%
{1251372,1R0726} => {3016663}	(O-ring, Oil Filter)> Spark Plug	6.1%	95.5%
{1352651,1R0726,3016663} => {1251372}	(Seal, Oil Filter, Spark Plug)>O-ring	6.0%	95.5%
{1352651,1R0726} => {1251372}	(Seal,Oil Filter)>O-ring	6.2%	95.3%
{1R0726} => {3016663}	(Oil Filter)> Spark Plug	9.3%	93.4%
{2262779} => {3016663}	(Engine Air Filter)>Spark Plug	6.5%	92.9%
{1251372,3016663} => {1352651}	(O-Ring, Spark Plug)> Seal	7.6%	92.3%
{3538398} => {3538397}	(Connector Assembly)> Connector Assembly	6.6%	91.8%
{2953099,3538398} => {3538397}	(Spark Plug, Connector Assembly)> Connector Assembly	6.6%	91.8%
{2893107,4195656} => {2967780}	(Gasket, Head As-Comb)> Gasket	6.5%	89.6%
{2893107,2953099,4195656} => {2967780}	(Gasket, Spark Plug, Head As-Comb) Gasket	6.5%	89.6%
{1352651,3016663} => {1251372}	(Seal, Spark Plug)> O-Ring	7.6%	89.4%
{1251372,1352651} => {3016663}	(O-Ring, Seal)> Spark Plug	7.6%	89.2%
{1352651} => {1251372}	(Seal)> O-Ring	8.5%	88.3%
{1352651} => {3016663}	(Seal) > Spark Plug	8.5%	88.0%
{1251372} => {1352651}	(O-Ring)> Seal	8.5%	84.9%
{2262779,3016663} => {1R0726}	(Engine Air Filter, Spark Plug)> Oil Filter	5.4%	83.3%

Support = % of baskets which contain those items

Confidence = The % chance they will buy suggested item given they bought the first set



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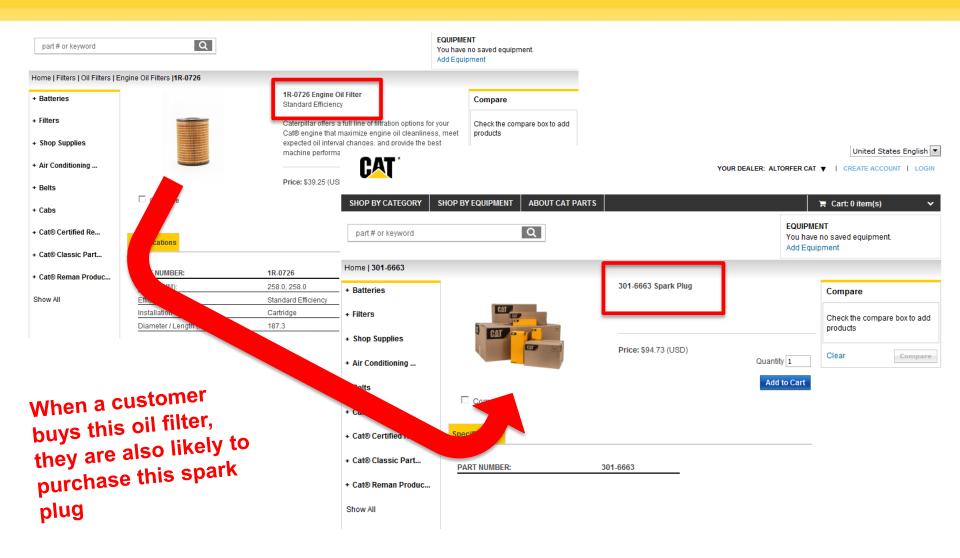
RESULTS EXPLAINED

Shopping For Part => Suggested Part	Shopping For Part Name => Suggested Part Name
{2953099} => {4195656}	Spark Plug => Head As-Comb
{2953099} => {2967780}	Spark Plug => Gasket
{2953099} => {2893107}	Spark Plug => Gasket
{2953099} => {1352651}	Spark Plug => Seal
{2953099} => {1251372}	Spark Plug => O-Ring

- Part purchases tend to follow maintenance intervals
 - If you are replacing a Spark Plug, you are looking to replace Gasket, Seals, O-Rings, Head As-Comb, etc.



Individual Example





Information Analytics

IMAGINE.... FROM THIS

Q part # or keyword

EQUIPMENT

You have no saved equipment. Add Equipment

Compare

products

Clear

Check the compare box to add

Compare

Home | Filters | Oil Filters | Engine Oil Filters | 1R-0726

- + Batteries
- + Filters
- + Shop Supplies
- + Air Conditioning ...
- + Belts
- + Cabs
- + Cat® Certified Re...
- + Cat® Classic Part...
- + Cat® Reman Produc...

Show All



1R-0726 Engine Oil Filter Standard Efficiency

Caterpillar offers a full line of filtration options for your Cat® engine that maximize engine oil cleanliness, meet expected oil interval changes, and provide the best machine performance and component protection.

Price: \$39.25 (USD)

Add to Cart

Quantity 1

Specifications

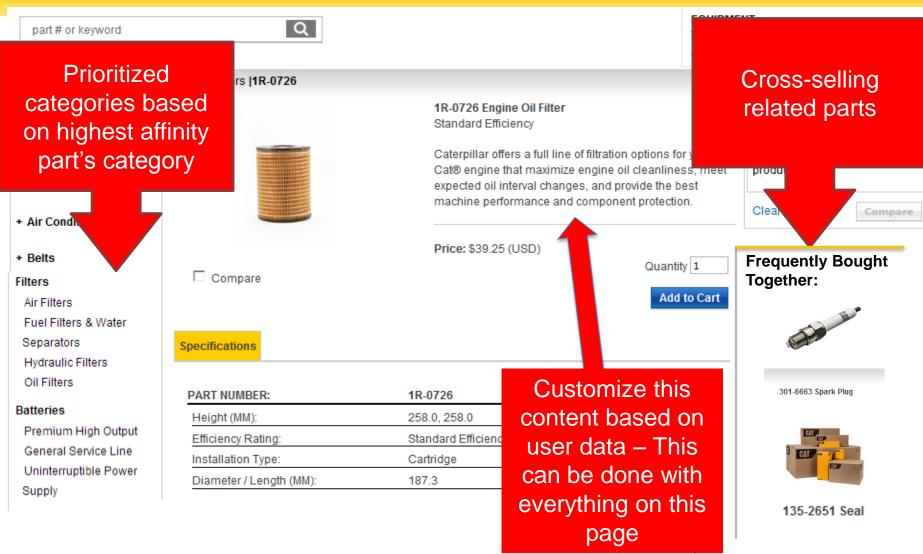
☐ Compare

PART NUMBER:	1R-0726
Height (MM):	258.0, 258.0
Efficiency Rating:	Standard Efficiency
Installation Type:	Cartridge
Diameter / Length (MM):	187.3



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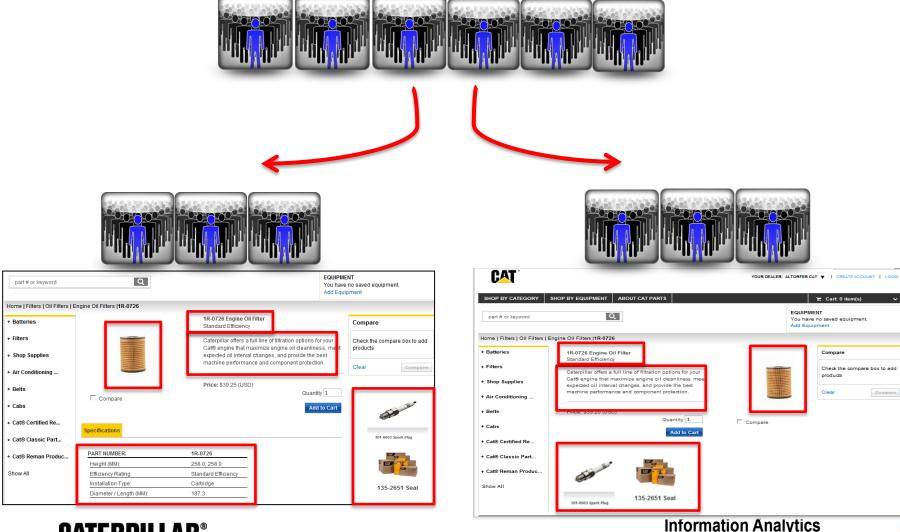
IMAGINE.... TO THIS



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A/B TESTING to Optimize



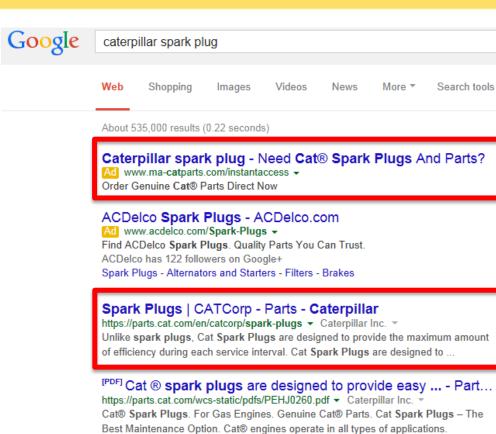
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Things to keep in mind ...

- Search Related Fixes
- Links from Search Engines
- Internal Site Searches
- URL structure
- Shopping by Category
- Shopping by Equipment
- Overarching Website Goals
- Funnel Strategy

GOOGLE SEARCH



4C-4601 Spark Plug Socket | CATCorp - Parts - Caterpillar

https://parts.cat.com/en/catcorp/special.../4C-4601 ▼ Caterpillar Inc. ▼ 4C-4601. Application: Special thin wall for use on G3500 and G3600 Engines. Length: 103.1 mm (4.06 in) long. Size: 7/8 inch hex, 1/2 inch square drive, 6 point.

Shop for cater



Caterpillar Spark Plug C... \$3.66 Intella Liftparts



Spark Plug Caterpillar P... \$14.79 eBay

Shop by price – Up to \$15 \$15 -

Ade (1)

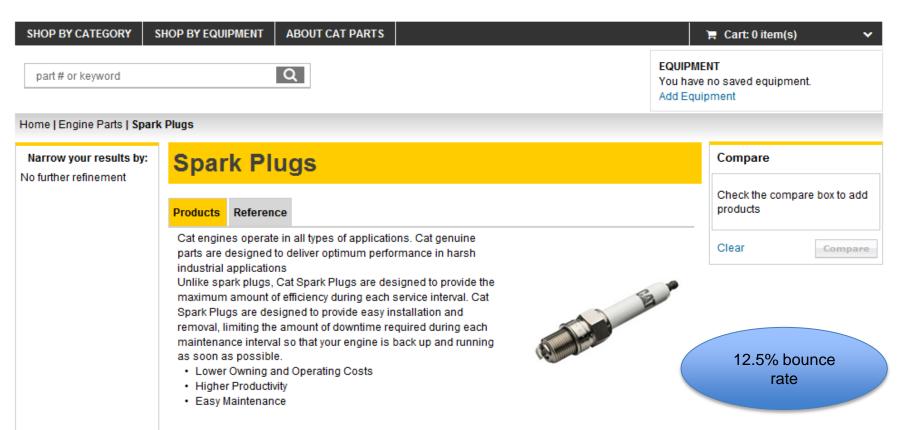
1 Year Organic Spark Plug Search

		Acquisition	
Keyword ?		Visits ? ↓	
		15 % of Total: 0.00% (1,386,783)	
1.	3h-2033 spark plugs	1 (6.67%)	
2.	4c-4601 spark plug socket	1 (6.67%)	
3.	cat 124-7380 spark plug application	1 (6.67%)	
4.	cat 346-5123 spark plug europe	1 (6.67%)	
5.	cat 4c-4601 spark plug socket	1 (6.67%)	
6.	cat spark plug 3016663	1 (6.67%)	
7.	cat spark plug gapper tool	1 (6.67%)	
8.	cat spark plugs	1 (6.67%)	
9.	cat spark plugs 4w2258	1 (6.67%)	
10.	cat, spark plug 301-6663	1 (6.67%)	

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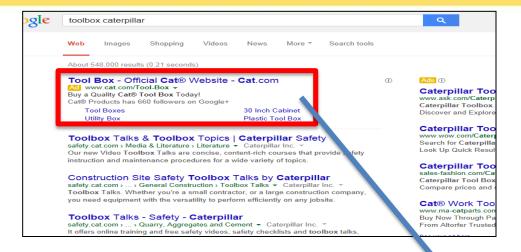
YOUR DEALER: ALTORFER CAT ▼ | CREATE ACCOUNT | LOGIN

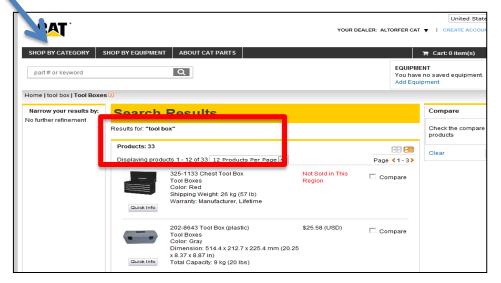




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Links from Search Engines

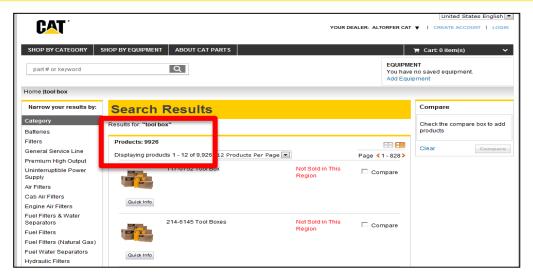






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Internal Searches







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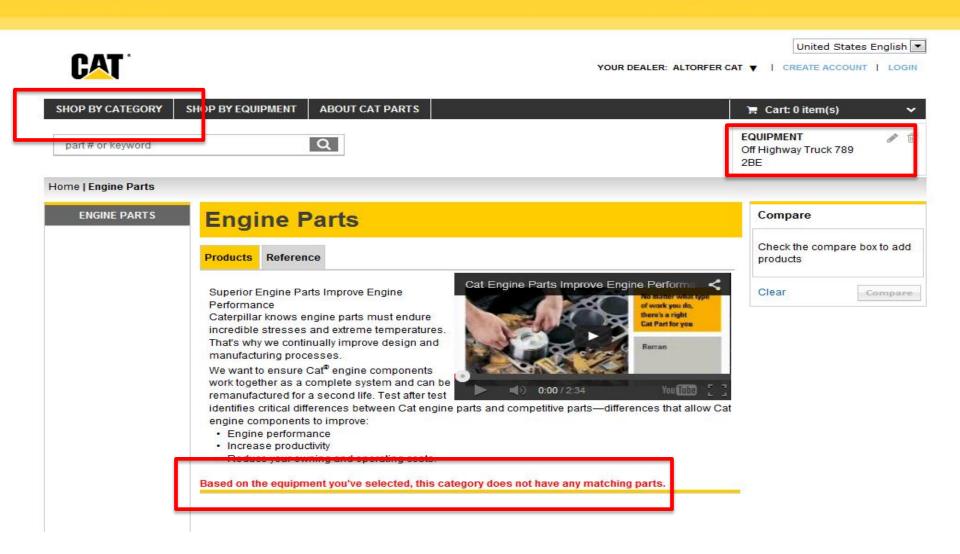
URL structure & design

=	Page ③	Pageviews ?	
			1,273 % of Total: 0.04% (3,587,057)
Ø.	/en/catcorp/engine-oil-filters/1R-0726	E	423 (33.23%)
V	2. /en/catcorp/1R-0726	(a)	412 (32.36%)
V	3. /en/catcorp/filters/oil-filters/1R-0726	æ	300 (23.57%)
V	4. /en/catcorp/filters/engine-oil-filters/1R-0726		24 (1.89%)

Four different URL structures for the same product



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OVERARCHING WEBSITE GOAL



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FUNNEL STRATEGY

		Acquisition	
K	Seyword ?	Visits ② ↓	
		16,807 % of Total: 1.21% (1,388,783)	
1.	cat filters	713 (4.24%)	
2.	cat filter cross reference	571 (3.40%)	
3.	caterpillar filters	465 (2.77%)	
4.	caterpillar filter cross reference	375 (2.23%)	
5.	cat filter	201 (1.20%)	
6.	caterpillar oil filters	161 (0.96%)	
7.	caterpillar fuel filters	152 (0.90%)	
8.	cat fuel filter	128 (0.76%)	
9.	cat filters cross reference	127 (0.76%)	
10.	cat fuel filters	120 (0.71%)	

		Acquisition
Keyword ②		Visits ? ↓
		15 % of Total: 0.00% (1,386,783)
1.	3h-2033 spark plugs	1 (6.67%)
2.	4c-4601 spark plug socket	1 (6.67%)
3.	cat 124-7380 spark plug application	1 (6.67%)
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5.	cat 4c-4601 spark plug socket	1 (6.67%)
6.	cat spark plug 3016663	1 (6.67%)
7.	cat spark plug gapper tool	1 (6.67%)
8.	cat spark plugs	1 (6.67%)
9.	cat spark plugs 4w2258	1 (6.67%)
10.	cat, spark plug 301-6663	1 (6.67%)



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CONCLUSION

- The user experience should be the primary initial focus
- Testing can help optimize the site and determine what is successful or what needs changed
- A plan is needed to fill the top of the funnel
- MBA can identify efficient ways to fill the top of the funnel regardless of communication vehicle
 - Filters are a great product to piggy back off for search
- Market Basket Analysis is an excellent method for tapping into transactional data to identify cross selling opportunities
 - The files are in place to run this for every part number



Back up slides



Information Analytics

WEBSITE ISSUES: DESIGNING FOR DATA

Designing for Data:

Designing a user experience(UX) with the purposeful intent of collecting user data (ex. – loyalty cards)

Importance:

- Forces excellent design
- Can measure success of the designed user experience
- Better testing metrics
- Capture valuable consumer information which can be used for further customization

Current problems with UX? What data is Cat missing?

