

RealDecoy's Search Platform Performance Quadrant: Scorecards

Analysis of ATG Search, Elasticsearch, Google Search Appliance, Oracle Commerce Guided Search and Solr







About RealDecoy

RealDecoy is a CX applications company delivering Commerce and Data Insight solutions. The company is an end-to-end Oracle Commerce expert and trusted Oracle Gold Partner. Oracle Commerce integration (ATG & Endeca), audits and search tuning are among RealDecoy's marquee offerings. Visit www.realdecoy.com or contact us by phone at +1.613.234.9330.

About the Authors

Andrew Shapiro, Principle Consulting Architect

Architecting successful e-commerce solutions for Walmart, Verizon Omni-Channel and Urban Outfitters, and resolving critical issues with ATG Search for CVS, are just a small slice of Andrew's many career achievements within the past 16 years. He completed his undergraduate degree at Cornell University as well as specialized graduate training in computer science at Northeastern University.

Jeff Reid, Partner Manager

Jeff brings over 15 years in the delivery of experience-centric solutions to customers in the retail, finance and the public sectors. He is certified in Oracle Endeca Commerce. An educator at heart, Jeff has been involved in the delivery and creation of content geared towards the enablement of hundreds of partners and customers worldwide.

Rachel Christian. Solutions Architect

Rachel's expertise spans e-commerce and customer analytics solutions. Over the past four years at RealDecoy, she's achieved certification for Oracle Endeca Commerce, worked on a global financial institution's commerce site, and gained deep technical knowledge of many popular e-commerce search platforms used by today's top retailers.

RealDecoy's Search Platform Performance Quadrant

Note: Read our full blog post on this topic for more context and background info.

At RealDecoy, we're often asked by clients and prospects, especially in the retail sector where conversions are king, which search platform is the best option to drive business goals. This sparked a need for a data visualization that encapsulates the search platform assessment conducted by our team of experts at RealDecoy. We call it the **Search Platform Performance Quadrant**, inspired by technology research and advisory firm Gartner and its "Magic Quadrant" reports. We believe it's a familiar format that resonates with readers.

We've analyzed search platforms from the perspective of very large midmarket and enterpriseclass retailers that live and die by the extent to which they convert online shoppers. Our analysis is contextualized more for Tier 1 retailers with revenues in excess of \$200 million, rather than Tier 2 retailers that earn between \$20 and \$200 million annually. This is a subjective analysis based on a combination of our own technical experience, anecdotal evidence and research intelligence.

Our quadrant is a tool to help retail business teams evaluate which search platform is most in line with their business goals. We've analyzed the platforms our own clients ask us about most often, recognizing it is not an exhaustive list.



Assessment criteria

We analyzed each search platform on two main dimensions, represented on the horizontal axis and vertical axis of the quadrant.

First, we rated each platform's ability to **drive conversions (horizontal axis)**, based on their overall ability to deliver relevant search results. We reviewed search platforms against the following eight categories, scored on a 10-point scale (1 = terrible, 10 = excellent), and then standardized into percentages, from 0 to 100 per cent:

- Leverages your own data to drive relevancy: the degree to which the search platform is capable of leveraging data attributes to drive relevant search results.
- **Business user control:** the extent to which the search platform provides business users with the control they need to make updates and deliver timely, engaging campaigns.
- Catering to personas: the extent to which the search platform enables business users to cater content to unique personas.
- Refresh speed: the speed with which the index can be rebuilt or updated.
- Data / index management features: the extent to which the search platform allows for incremental indexing and the auto-pruning of data without manual intervention.
- **Spelling correction:** the extent to which the search platform offers comprehensive linguistic functionality (i.e. removes spelling mistakes and/or localized differences).
- Reporting: the degree to which the search platform offers business users the ability to monitor user search behavior.
- **Platform tuning:** the ease with which the search platform can be tuned for optimal user experience.

SEARCH PLATFORM PERFORMANCE						
Ability to Drive Conversions						
Criteria (1=terrible; 10=excellent)	Oracle Commerce Guided Search	ATG Search	Solr	Elasticsearch	Google Search Appliance	
Leverages your own data to drive relevancy	9	7.5	9	9	6	
Business user control	5	4	0	4.5	5	
Ability to cater to unique personas	9	9	6	6	8	
Speed of catalog refresh	6.5	5	9	9	7	
Data / index management features	7	4	9	9	6	
Spelling correction	10	5	9	9	9	
Reporting capability	8	4	0	7	10	
Ease of search tuning	8	5	10	6	4	
OVERALL SCORE (0-80)	62.5	43.5	52	59.5	55	



Next, we assessed the **ability to meet business needs (vertical axis)**. We reviewed search platforms against the following seven categories, scored on a 10-point scale (1 = terrible, 10 = excellent) and then standardized into percentages, from 0 to 100 per cent:

- **Total cost of ownership:** a combination of license fee and the cost to operate, maintain and customize the search platform.
- Experience management: we considered the ease with which an experience management addition can be applied to a search platform's native search functionality, and the extent to which the platform empowers business users to control search functionality and extend personalization.
- **Flexibility:** the degree to which a search platform can be configured to business needs, and the level of effort involved to make changes.
- **Data consumption:** the extent to which a variety of data sources can be ingested, and the platform's ability to overlay these data sources.
- Multilingual/multi-site: the ease with which the search platform can be managed and indexed across multiple languages, brand websites and/or product catalogs to display the most contextually relevant content.
- Support / maintenance: the degree to which established lines of support are available.
- Hardware footprint: the extent to which a search platform is linearly scalable without extra costs.

SEARCH PLATFORM PERFORMANCE					
Ability to Meet Business Needs					
Criteria (1=terrible; 10=excellent)	Oracle Commerce Guided Search	ATG Search	Solr	Elasticsearch	Google Search Appliance
Total Cost of Ownership	4	3	2.5	4	4
Experience Management	10	3	3	5	0
Flexibility	9	5	9	6	4
Data consumption	9	5	9	9	5
Multilingual/multi-site	5	6.5	4	5	7
Support/maintenance	9	3	4	8	6
Hardware footprint	9	5	5	7	3.5
SCORE (0-70)	55	30.5	36.5	44	29.5



How it all shook out

We compiled all raw scores into the tables below, which formed the basis of our data visualization.

Our graphic includes four quadrants - Best Matches, Relevant, Needs Tuning and Irrelevant - aptly themed on search relevance.

"Best Matches" for our target readership include Endeca Search / Oracle Commerce Guided Search, Elasticsearch and Solr, followed by platforms rated as "Relevant," which include Google Search Appliance and ATG Search.

In our view, the majority of search options evaluated do not offer the flexibility and support typically required by large midmarket and enterprise-class retailers eager to drive improved conversions, customer retention and average order sizes. We believe that honor goes to Endeca Search. These other options can, however, provide a more affordable point of entry for SMEs looking for basic functionality.

SEARCH PLATFORM PERFORMANCE QUADRANT

Raw Scores

Search Platforms	Drives Conversions (0-80)	Meets Business Needs (0-70)
Oracle Commerce Guided Search	62.5	55
ATG Search	43.5	30.5
Solr	52	36.5
Elasticsearch	59.5	44
Google Search Appliance	55	29.5

SEARCH PLATFORM PERFORMANCE QUADRANT

Raw Scores Standardized to Percentages (0-100%)

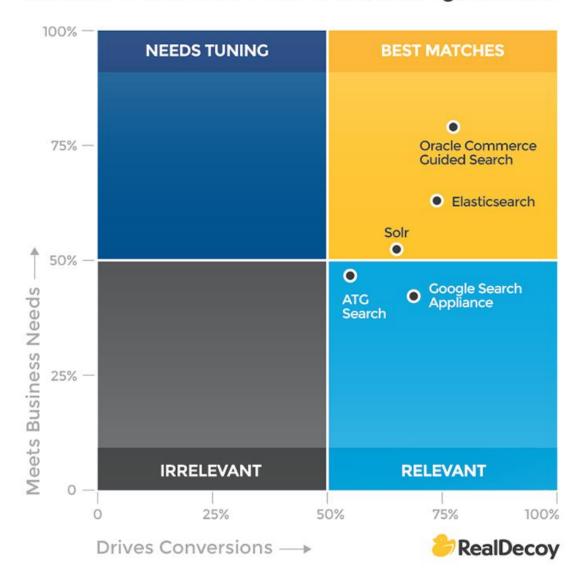
Search Platforms	Drives Conversions	Meets Business Needs
Oracle Commerce Guided Search	78%	79%
ATG Search	54%	47%
Solr	65%	52%
Elasticsearch	74%	63%
Google Search Appliance	69%	42%

At the same time, Endeca Search / Oracle Commerce Guided Search excels at delivering relevant search results, and generally, across the majority of categories assessed, it performs very well. Out of the box, it is rapid to deploy and easy to configure, complemented by Oracle's enterprise-level support. However, our overall scoring of Endeca Search / Oracle Commerce Guided Search places it just under the 80 per cent mark (a B+).

That's because we've only conducted an analysis of base search platform capabilities. All of the base platforms have room for enhancements, especially in terms of personalization. That is, delivering experiences tailored to the tastes of individual online shoppers.



Search Platform Performance Quadrant



Retailers with base search capability might be asking, "what comes next?" On one hand, there are customizations available in the field you can either purchase or build yourself. On the other, an Oracle upgrade path to include the advanced personalization features offered by Endeca Search / Oracle Commerce Experience Manager is worth considering – especially if you're serious about competing against the Amazons of the world.

Our case studies on <u>Acklands-Grainger</u>, <u>American Apparel</u>, <u>Lands' End</u> and <u>Office Depot</u> outline the results companies can achieve when business users are empowered to orchestrate inspired online buying experiences.



The landscape is always changing

Other search options include SDL Fredhopper and Demandware, a low-cost SaaS option used by some mid-market retailers. Adobe Search&Promote (formerly Mercado) is a vendor-supported platform that is a head-to-head competitor with Oracle Commerce and its search capabilities in many respects. We also heard at OpenWorld 2014 that SAP is planning on bringing to market a search solution for Hybris's e-commerce platform.

That's why this analysis will continue to evolve with your feedback. We've shared our thoughts on <u>Endeca Search and Solr</u>, and the other options listed in this review that we will analyze in more detail in the future.

<u>Please contact us via the form on our blog post</u> to share your experience with various search tools. We'll review and consider all feedback for the next iteration of RealDecoy's Search Platform Performance Quadrant.

