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Guided Product Search: How Product Attributes Help Online Retailers Increase Sales

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Abstract

This white paper reviews the current state of product attribute use in online shopping channels and gives insight into the future trends retailers can look forward to. In addition, it presents an automated solution that allows retailers to provide the necessary data to comply with new attribute data requirements with minimal changes to existing shopping feed procedures.

What are product attributes? And why are they important?

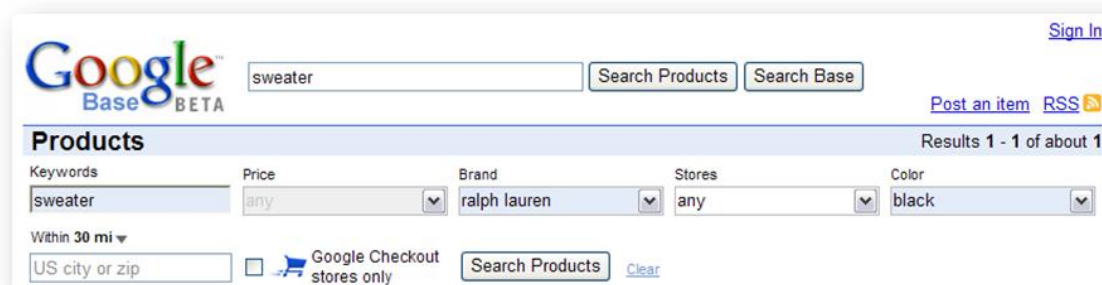
An attribute is simply a word that describes a product – a characteristic of that product. All products have attributes; most products will have several. For example, product attributes include color, size, fabric, and brand.

Shopping engines that use product attributes offer consumers a better, more user-focused shopping experience. When product attributes are available, consumers can compare products or narrow their search results by selecting which attributes they desire in the product they want to buy.

Let's say a consumer wants to buy a sweater. They will typically have a style and size in mind, possibly even a brand and color. The shopping engine offering attribute selection allows the consumer to filter based on these characteristics, and the results of their search on the shopping engine will be a manageable list of products that meet their requirements. At that point, the consumer can more easily select the item they want to buy, because they are presented with the choices that more closely match what they want.

Recent changes to Google's data requirements have brought attention to the use of product attributes. Though Google has only mandated their usage since March 1, 2007, other online marketplaces have been using them to provide more relevant search results for customers for several years.

With product attributes increasingly relied-upon by shopping engines and their end consumers, there is an opportunity for retailers to improve their performance on shopping engines that make use of this data. In fact, those retailers who don't provide attribute data can expect poorer performance and even exclusion from some shopping engines.



Google Base presents shoppers with a user-friendly product search capability, which requires retailers to provide product attribute data in their product feed.

The inclusion of product attributes overcomes an issue that has plagued online shopping for many consumers in the past: too many irrelevant products returned in their search results.

Guided Product Search is the term most frequently used to describe the ability to narrow their search results using attributes. Other terms that generally have the same meaning include facet-based search and guided navigation.

The Problem for Retailers

It's easy to see that the ability to narrow a search using product attributes makes shopping easier for consumers. However, this creates a need for retailers to expand their data feeds to include these attributes – if they are even available in the retailer's content system. Currently, some shopping engines harvest the attributes from product data supplied to them (with mixed results), while others require them to be included in the data feed submitted.

Given current market indications, the trend is set to continue toward requiring submission of product attribute data in retailers' shopping feeds. However, as the use of attributes becomes more widespread, the importance of data accuracy is also presenting far-reaching implications for marketers.

It's not enough just to be included!

The Internet is moving beyond simple keyword-based searching. Tim Berners-Lee, the founder of the World Wide Web, believes his vision of the semantic web is about to be realized as information on the web becomes more structured.

Web pages and search engines will start to reflect information based on a deeper knowledge of what things are by putting them in context. For example, it's possible for a search engine to understand that a web page is about cameras, as certain words are associated with what a camera is and what it does.

As search engines become more accurate, they also become more demanding. Retailers need to understand how to represent their products in the context of what they mean, not just a string of keywords. To do this, you must understand how the meaning is expressed and how your product fits into that expression.

Current Uses of Product Attributes

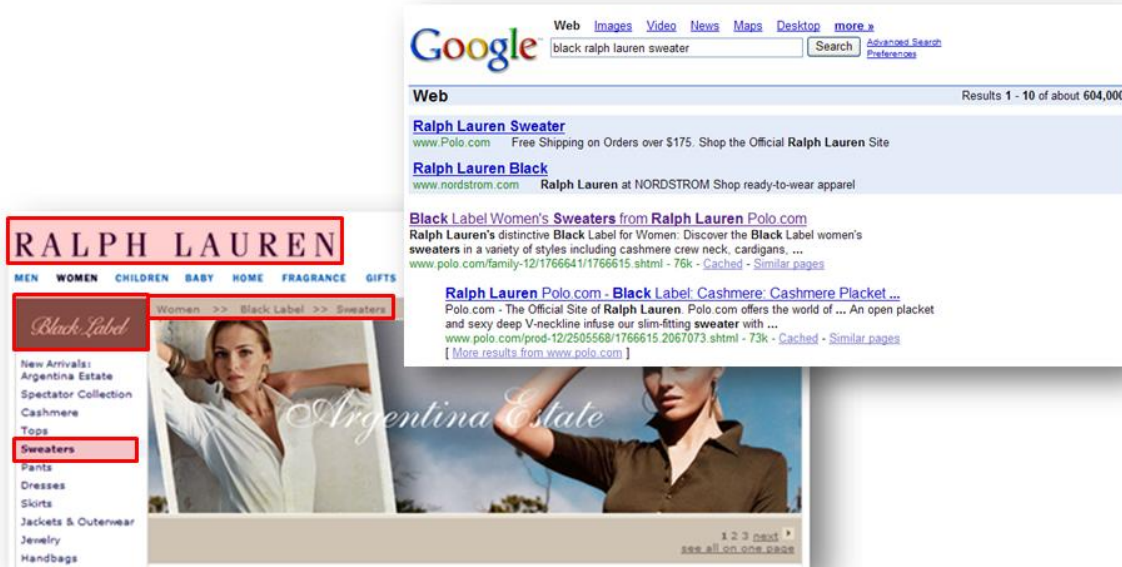
Google

Google now requires online retailers to provide attributes in their product data feeds for use across Google shopping properties such as Google Base and Google Product Search. Products that do not include attributes are excluded from some search results.

The search results displayed on general search engines suffer from a lack of context required for product searches, as shoppers may have to sift through many listings in order to find the product they were hoping to purchase.

For example: A search for a "black ralph lauren sweater" yields 604,000 results. A searcher hoping to buy a "black Ralph Lauren sweater" will have to sift through these results to find the sweater they were looking for.

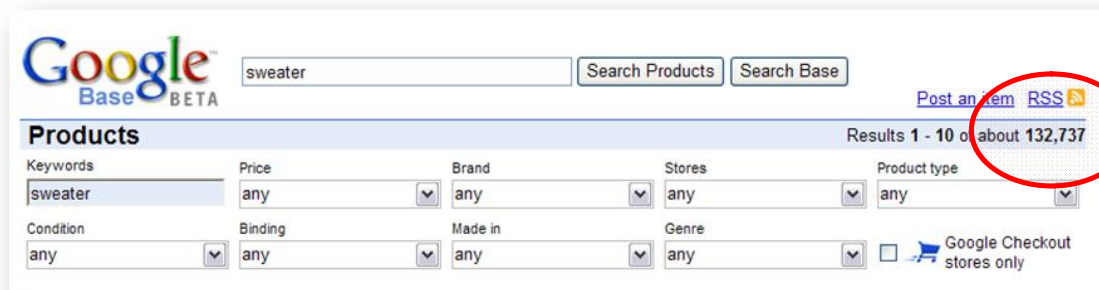
If the consumer clicks the first natural search listing to the Polo web site, the consumer will not find a black sweater, but instead will see that Google has misinterpreted the "Black Label" brand with the color "Black". This lack of context prevents search engines from providing relevant results for most product searches.



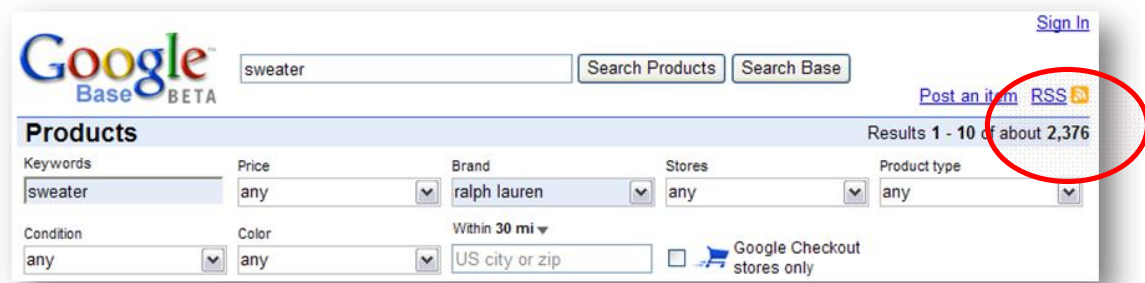
The Future of Google Product Search

For more targeted results, online retailers can provide data feeds directly into Google Base, which is an emerging source of content for Google's sites.

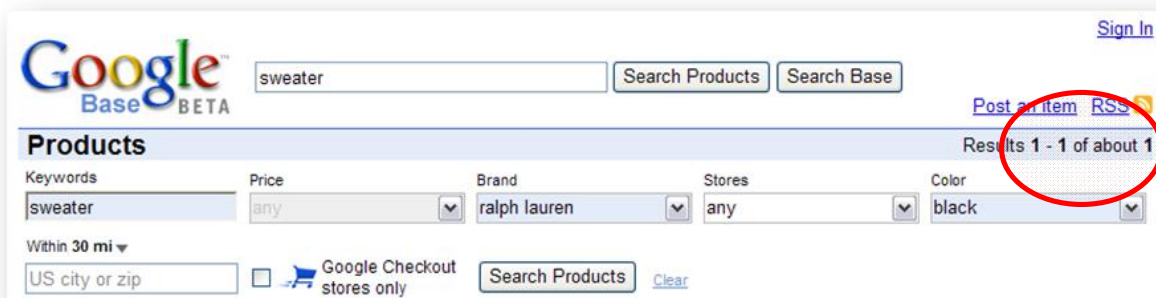
Future product searches will be powered by Google Base and driven by context-sensitive attribute filters. Take a look below at how the search results can be narrowed using selection of desired product attributes.



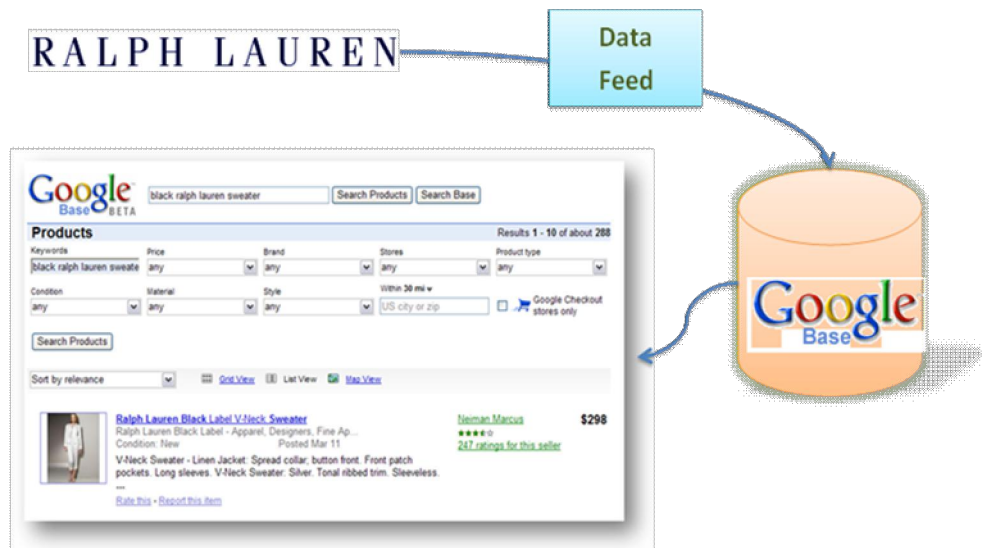
Filtering by brand narrows the results from 132,737 to 2,376 matches.



Filtering by color narrows the results from 2,376 to 1 match.



The one product that matches the specified attribute values is the only one that provided both brand and color to Google Base in its data feed. There are actually 288 black Ralph Lauren sweaters in Google Base, but just one met the Google mandate for product attributes.



Category	Attribute Name	Values
Clothing	SpecialSize	Big & Tall, Maternity, Petite, Plus Size
Clothing	ClothingColor	Red, Blue, Yellow
Clothing	ClothingMaterial	Silk, Cotton, Wool, Denim
Clothing Hat	HatType	
Clothing Sunglasses	SunglassesType	
Clothing Sunglasses	SunglassShape	
Clothing Handbags	HandbagType	
Clothing Handbags	HandbagMaterial	
Clothing Dresses	DressType	
Clothing Bras	BraTypes	
Clothing Underwear	UnderwearType	
Clothing Coats	CoatType	
Clothing Jackets	JacketType	
Clothing Pants	PantType	
Clothing Shirts	ShirtType	Athletic, Blouse, Button-Down, Casual, Dress, Duster, Halter, Henley, Hoodie, Jersey, Oxford, Peasant, Polo, Pullover, Rugby, Sweatshirt, Tank, Tropical & Hawaiian, T-Shirt, Tube, Tunic, Turtleneck, Tuxedo, Western, Work, Wrap, Cami, Twin Set, Bowling, Camp

MSN Shopping encourages the use of attributes but does not require attributes to be provided. Values for some attributes are specified.

Future Trends in Attribute Use

In order to determine how to respond to these developments, retailers must understand the future direction of these trends. Outlined below are the major predicted developments that retailers will need to watch for as they incorporate attributes into their data feed strategies.

- The trend toward guided product search means that Google Base can be expected to play an increasingly important role in natural search listings on Google.com for product searches.
- The attribute requirements will continue to change rapidly:
 - More attribute types
 - More defined attribute values
 - Changes in attribute values to match changes in consumer preferences
- More shopping engines will follow the lead of Amazon, Google and MSN Shopping.
- Those that “harvest” attributes themselves will start to request or require attributes from retailers.
- Retailers that do not support the attribute mandates will lose sales to those who do.

In short, it is imperative that retailers understand the implications of product attributes for their brand and products and implement them swiftly.

Action Items for Online Retailers

- Comply with the new data feed requirements defined by Google.
- Provide as many attributes to the shopping engines and marketplaces as possible.
 - For Google Base, create custom attributes if Google doesn't have a documented field for each of your attributes.
- Closely monitor the changes to the attribute definitions for Amazon, Google Base and MSN Shopping.
 - Watch for which attributes become more prominent, and which ones become less relevant.
- Consider outsourcing these data feeds to Channel Intelligence.

Technology That Makes Attributes Easy for Retailers

SellCast™ featuring CommerceIQ™ technologies:

SellCast™ is a retail technology solution that automates the optimization and delivery of data to online marketplaces. It organizes products into categories and provides the data to shopping engines customized to meet the requirements of each shopping engine.

Attributes are automatically extracted from the descriptive text provided by the retailer, or are populated using attribute data provided directly to Channel Intelligence by the manufacturers. Each attribute value is mapped to the value expected by each shopping engine. So data is sourced, set up and delivered according to the optimal method for each retail shopping site.

CommerceIQ is the patented data platform that provides the foundation for effective, interconnected commerce through an integrated series of intelligent data services. CommerceIQ uses the collective intelligence of all product data to create a complete and meaningful representation of each product.

As the collective repository of commerce data, CommerceIQ creates a complete product view and then translates and transports this information across commerce channels.

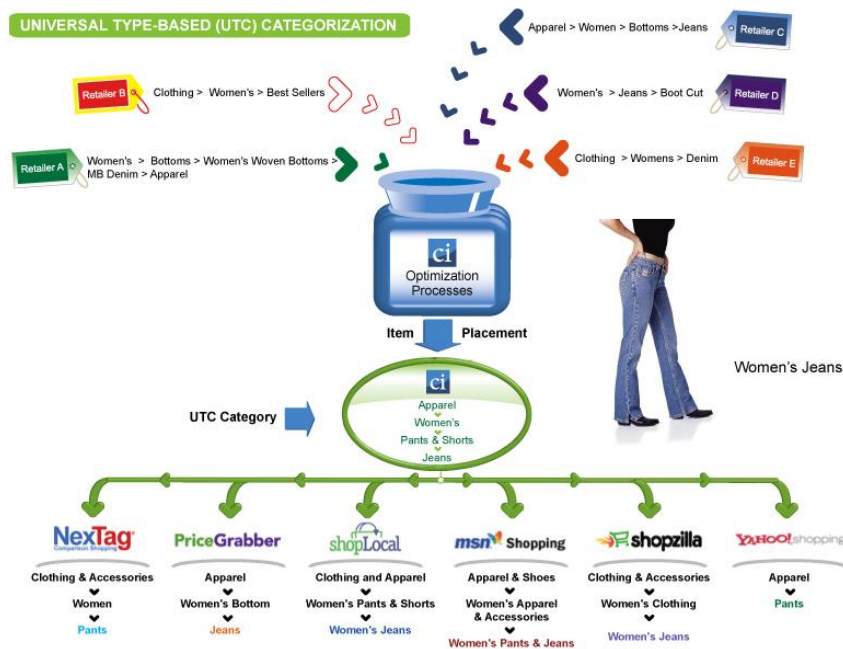
To better understand how CommerceIQ facilitates devising and implementing a successful shopping engine feed strategy, three intelligent data services included in CommerceIQ are outlined below.

CategoryIQ™ - Automated placement of items into the correct category (also called ItemType or ProductType)

Every product is individually placed into the correct type-based category within the Channel Intelligence universal taxonomy. These Universal Type-based Categories (UTCs) allow scalable, rapid and accurate placement of products that enables consumers to find these products throughout online retail channels.

In addition to powering intuitive category-based search for products, the context provided by these detailed product clusters allows for powerful data analytics and enables further data enrichment.

For retailers, CategoryIQ defines the organization of products across more than 30 marketplaces and CSEs. The following diagram shows how products from multiple retailers are brought into the UTCs and then delivered to the marketplaces and shopping engines via pre-mapped links to each shopping channel.



KeywordIQ™ - Automated discovery and ranking of search terms used by consumers to find and buy products.

Keyword evaluation lets retailers discover which keywords are most likely to accurately target searches for your product. There is often a distinction between the keywords that draw people to a product and those that draw people with the intent to purchase it.

Additionally, keywords are dynamic. New ones become significant as the market changes and keyword significance may vary seasonally, for example before Christmas or Valentine's Day.

KeywordIQ makes information available to retailers on which they can base their choices for effective targeting:

- Identification and ranking of high-performing keyword phrases to populate Google's "label" field and Amazon's "SearchTerm" fields.

- Ranking can be based on traffic, conversion rate, sales, ROAS, net contribution and other metrics.

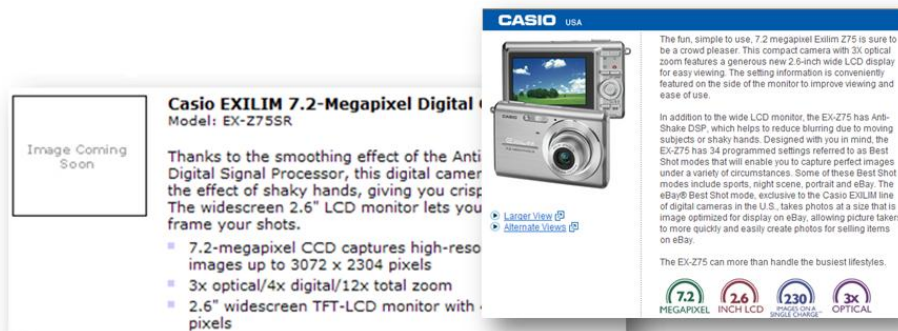
High-performing keywords are delivered to shopping channels to capture qualified buyers.

AttributeIQ™ - Automated discovery and sourcing of attributes that are then mapped to the values expected by each individual shopping channel.

Relevant product attributes are automatically extracted from the retailer's online product catalog and used to power guided product search at the leading online marketplaces and comparison shopping engines.

- Automated discovery of attributes within the descriptive text provided by the retailer
- Sourcing of attribute data directly from the manufacturers
- Mapping of attribute values to the values expected by each shopping channel

Example of AttributeIQ at work:



Attribute	Retailer Value	Amazon Value	Google Base Value
Brand	Casio	Brand = Casio	g:brand = Casio
Color	Silver	Color = silver	g:color = silver
Megapixel	7.2	<u>MaxImageResolution</u> = 7.2	g:megapixels = 7.2 MP
Screen Size	2.6"	<u>LCDScreenSize</u> = 2.6	c:ci_screen_size = 2.6 inches
Image	None	http://www.casio.com/resource/images/large/ex-z75sr_large.jpg	http://www.casio.com/resource/images/large/ex-z75sr_large.jpg

Note how AttributeIQ picks out important attributes for this digital camera from the retailer's site and even references the image on the manufacturer's site to pull together the complete, accurate data for the shopping engine.

Conclusion

With attributes playing an increasingly important role in guided product search on shopping engines, retailers must devise a strategy to provide this data or face being left behind in online sales performance.

SellCast™ presents a solution that helps retailers discover and provide attributes that are appropriate and comprehensive. In addition, the CommerceIQ™ platform which is leveraged by SellCast further boosts the efficacy of shopping data feeds by targeting optimal keywords and categorization of products.

For more information on **SellCast™ Online** or the **SellCast™ Retailer Solutions** suite of services, please contact a Channel Intelligence sales representative at:

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E-Mail: retailsales@channelintelligence.com

A white paper on **Maximizing Profits with Comparison Shopping Engines** is also available at http://www.channelintelligence.com/sc_white_papers.htm.