Best practices in site search:  
A benchmarking study of Indian online retail websites

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Abstract:
Background: Providing an effortless online user experience (UX) for customers is a key to the success of any e-commerce business. E-commerce site search is a big factor in this experience and if done right, can provide a significant competitive advantage. However, a 2014 E-commerce search usability report from Baymard Institute finds that site search often does not work well, with only a handful of sites delivering what may be regarded a decent search experience.  
Purpose: The purpose of this study is to generate a list of best practices in e-commerce site search and benchmark the Indian e-commerce websites against these best practices.  
Methodology: A set of best practices in site search are generated by reviewing whitepapers and industry reports. About 23 best practices were identified and grouped into five categories, namely search box features, search functionality, search results, personalized search and commerce-enabled search. About 30 Indian online retail websites were identified and their site search was then benchmarked.  
Findings: Most of the sites could not match misspelled search terms with the appropriate products. Many websites offered minimal or no filtering/sorting options of search results. More than half of the sites provided little or no help on their ‘No results found’ pages. The differences in site search among the five categories of best practices are discussed.  
Practical Implications: This study has generated a useful compilation of best practices in e-commerce site search, thus providing a way to benchmark a particular e-commerce website’s search against the best practices.  
Originality/Value: Most of the studies dealing with on-site user experience discuss issues related to site navigation, content and interface design. However, this study has highlighted the importance of site search to the overall user experience. It has identified the areas where the Indian e-commerce websites have to improve in terms of their site search.  
Keywords: Benchmark, best practices, e-commerce, site search, user experience

Introduction
Internet has empowered all the users to search their requirements in no time but e-commerce websites has still not improved its efficacy in terms of on-site search as there are many e-commerce sites in India now. It’s becoming more and more essential that all e-commerce websites, irrespective of size, implement better on-site search to aid their shoppers find the items they need as quickly and appropriately as possible. Shoppers are continuously looking for convenience in online shopping, this is due to a change in consumer shopping behaviors, by which internet users have become accustomed to functional faceted searches, such as those available on sites like Amazon, Flipkart, Snapdeal and...
more. On-site search is the main contributor to the success of almost any e-commerce business, but it is often not given that much importance in site optimization (Arora, 2015). Search is a key component in internet marketing as the customer’s visiting the site have only eight seconds to decide upon whether to browse further or abandon the website for not having good optimized website. User experience plays a vital role in internet marketing and well optimized site with good on-site search will fulfill the customers desired search item.

Site Search for e-commerce websites
There are many online e-commerce websites that are trying to differentiate themselves from their competitors, this competition if on-site search is done well, it can lead to greater conversions and increased average order value for any e-commerce sites. This is very significant because whenever a purchaser uses a specific search phrase, they are likely to be searching for the particular product they aim to buy. In other words, customers utilizing on-site search are further down the conversion funnel than those users simply surfing the site. Since these shoppers are at an advanced stage of the buying process, ensuring that website’s search feature helps them find the products they are searching for should be a high priority (Arora, 2015). With such a large range of Stock Keeping Units (SKU) available on numerous retail websites, the major concern for many of these sites is product discovery. A site visitor must be able to find the right product quickly and make a purchase effortlessly. In a retail business store atmosphere is very important, similarly retail website should offer the convenience to its users for comfortable shopping experience. In that aspect, the Search box is a powerful site feature critical to the shopper’s experience (Dynamicweb, 2014). According to eConsultancy, up to 30 per cent of ecommerce visitors will use internal site search for searching their desired product. Due to the increased level of purchase intent of user who is searching for their desired product, users are also known to convert sometimes up to five to six times higher than the average non-site search visitor (Walker, 2014). Retailers need site search for improved sales as it offers opportunities for merchandising, higher conversion rates, increased site usage which can boost repeat purchase and improved branding which leads to a better customer journey compared to competitors (Charlton, 2015).

Figure 1. Illustrative screenshot showing on-site search in search box of Bigbasket.com
Background of the Study
E-commerce businesses had been doing well in India from 1996 and has evolved into many forms. It is very essential for the ecommerce sites to have competitive advantage which can attract the customers to their site for their purchase. If site users can’t discover what they are searching for, they can’t purchase it. Power of On-site search was not leveraged by many Indian e-commerce sites and need for a benchmark study of Indian e-commerce websites was realized. A 2014 e-commerce search usability report from Baymard Institute finds that site search often does not work well, with only a handful of sites delivering what may be regarded a decent search experience (Baymard, 2014). Internal product search Algorithms was first built by Amazon and eBay focusing on their universe of products, sellers and customers. At present e-commerce websites are trying their best to offer the best experience to their customers in shopping but they are not doing good work in terms of getting the customer’s want of searching a required product in short span. This study enlightens the features present in different e-commerce websites in search functionality inside a website.

Research Methodology
This is a cross-sectional study using passive primary data collected through structured observation of the site search features. The on-site search in e-commerce websites is studied here in detail. The criterion is to obtain a good mixture of websites based on different business models selected for consideration, to understand the search feature inside the websites in these categories. Each Universal Resource Locator (URL) was verified and 30 websites (as shown in Annexure-I) were selected for observation based on their online popularity (Alexa rankings). Each site was examined in detail and various e-commerce on-site search features were noted according to the given categories. Data collected through passive observation method was recorded in a structured data entry table. Each cell in the table denotes a dichotomous scale measurement describing the absence or presence of an e-commerce on-site search practices. The observed websites represent full-fledged online retailers involved in multi-category, multi-brand products.

Best practices for benchmarking
Five categories of measurement for on-site search were adopted from Charlton (2015) and also subcategories under these five categories were developed for the benchmarking study. Categories taken for benchmarking study are explained here.

1. Search Box Feature
Characteristics of search box is measured in terms of its appearance and physical features under this category. Subcategories of Search Box feature as follows.

1.1 The search box easy to spot.
   The prominence and visibility of search box on the page should reflect that it can influence the user’s decision to make use of it to find products.

1.2 The Search box big enough for typical search queries.
   The need for this feature will vary from site to site depending on the product assortment and nature of business of the respective sites, but it’s important that search boxes are big enough to fit most queries.

1.3 Place the text in search box to encourage searches
   The text prompts the user to search and also suggests the kinds of products they may look for.

1.4 Make the Text Disappear
   Ecommerce sites should ensure that the default text in the box disappears as users click to enter their own search term.

1.5 Place a site search box on each page of the site.
   Each page of the site should have search box for customers to get back to a product search from any point, and it also provides an alternative method of navigation for users that arrive at product pages.
2. Search Functionality.
   2.1 Use autocomplete for Site Search
   Sites should be smart enough to help customers find the search term they want, and to avoid issues like misspellings.
   2.2 Use autocomplete for merchandising
   Autocomplete with merchandising will help customers view their site search data complete with price, image and a snippet of text.
   2.3 Allow users to search within particular department
   This helps users to narrow their search from the very beginning, making it possible for the customers to find what they need quickly.
   2.4 Allow users to search using product codes
   It will be helpful for sites with lots of SKUs (Stock Keeping Unit), these searches imply buyer’s intent to purchase.
   2.5 Handle common misspelling
   Site should handle typo errors and serve results as if the mistake did not happen.
   2.6 Make it easy for users to find products with synonyms
   Users may search for a brand that site do not stock and there may be a common misspelling, then serve up results that are related to the search term instead of showing ‘no results found’.
   2.7 Show results in colour
   Sites may have a single product in multiple colours, then it is good to show the product in that colour according to customer’s search.
   2.8 Show the search query on results page
   Showing the search term on the results page will serve as an instant reminder to the customer, but also allows them to append or remove words from search in order to produce more accurate results.

3. Search Results.
   3.1 Accuracy
   Site should show the appropriate product according to the search term, it depends upon the product labelling and metadata (data about data).
   3.2 Avoid zero results page
   The site should show results for almost every search and it should try to avoid a dead end for users.
   3.3 Through in some social proof
   Social proof like review scores can help very well in urging the customers to take action towards a product.
   3.4 Show non-product results
   The site should help the users in searching for customer services, buyer’s guides, return policy and how-to guides.
   3.5 Show different product images on mouseover
   Mouseover effects on results pages can be useful to show product in context or from different angles which will help customers in gaining a better idea of the product with little extra effort.
   3.6 Show technical detail
   Electronic gadgets like laptops, mobiles should be shown with specifications in search results which helps users to compare features without having to visit the product pages.

4. Personalized search.
   4.1 Allow users to choose the way results are displayed
Users should have the option of selecting different views of results to tailor their own search results.

4.2 Use reviews as filter
Site should have the provision for users to do filter by review score.

4.3 Sorting Options
Sorting options helps the user to change the order of search results so they can view the most relevant first.

5. Commerce-enabled search.
5.1 Quick view options
Quick view enables customers to see a mini version of the product page and an ‘add to cart button’ without having to load the page.

Findings and implications
The following table indicates the degree of adoption of the best on-site search practices by the sampled Indian online retail websites.

Table 1. Best Practices followed by e-commerce websites representing three e-commerce business models (deals, e-retailers and directories)

<table>
<thead>
<tr>
<th>Best Practice categories</th>
<th>No.</th>
<th>Best Practices (Sub-Categories)</th>
<th>Implemented (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search Box Feature</td>
<td>1</td>
<td>The search box easy to spot</td>
<td>66.67</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>The search box big enough for typical queries</td>
<td>66.67</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Place text in search box to encourage searches</td>
<td>76.67</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Make the text disappear</td>
<td>83.33</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Place a site search box on every page of the site</td>
<td>100</td>
</tr>
<tr>
<td>Search Functionality</td>
<td>6</td>
<td>Use autocomplete for site search</td>
<td>86.67</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Use autocomplete for merchandising</td>
<td>53.33</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Allow users to search within particular department</td>
<td>53.33</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Allow users to search using product codes</td>
<td>46.67</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Handle common misspelling</td>
<td>66.67</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Make it easy for users to find products with synonyms</td>
<td>53.33</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Show results in color</td>
<td>60.00</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Show the search query on result page</td>
<td>86.67</td>
</tr>
<tr>
<td>Search Results</td>
<td>14</td>
<td>Accuracy</td>
<td>56.67</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Avoid zero results page</td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Through in some social proof</td>
<td>46.67</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Show non-product results</td>
<td>26.67</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Show different product images on mouseover</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Show technical detail</td>
<td>73.33</td>
</tr>
<tr>
<td>Personalized search</td>
<td>20</td>
<td>Allow users to choose the way results are displayed</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Use reviews as filters. Filtering options(faceted search in terms of Product category, Price Range, Size, Brand, Colour, User Ratings)</td>
<td>73.33</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Sorting Options (order of search results so they can view the most relevant results first.)</td>
<td>83.33</td>
</tr>
<tr>
<td>Commerce enabled search</td>
<td>23</td>
<td>Quick View options</td>
<td>26.67</td>
</tr>
</tbody>
</table>
Search box feature was well designed in most of the e-commerce websites. Search box should improve in terms of its visibility and size for encouraging large search terms. Search box visibility plays a major role in attracting the customer to search for their products comfortably and it is the one which helps the customers to reduce the opportunity cost in searching for a product. Search Box Functionality should be improved as many of them have fallen short in following the best practices under this category. Merchandising enhances the sale of a product in e-retailers websites but only less than sixty percentage of the e-retailers are following this practices. It is always not necessary that customers should know the correct spelling of the product what they are searching for, hence the site optimizers should handle common misspelling in their site’s search box to make the purchase journey of customer easy. Personalized search was very well developed in most of the sites but they should allow users to choose the way the search results are displayed with the help of good filtering option and sorting option. Commerce-enabled search empowers the customer to buy their product quickly without putting much efforts but less than thirty percentage of e-commerce websites have implemented this in their site search.

<table>
<thead>
<tr>
<th>E-retailer</th>
<th><a href="http://www.flipkart.com">www.flipkart.com</a></th>
<th><a href="http://www.bigbasket.com">www.bigbasket.com</a></th>
<th><a href="http://www.ebay.in">www.ebay.in</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.jabong.com">www.jabong.com</a></td>
<td><a href="http://www.naturesbasket.co.in">www.naturesbasket.co.in</a></td>
<td><a href="http://www.snapdeal.com">www.snapdeal.com</a></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.zivame.com">www.zivame.com</a></td>
<td><a href="http://www.youmart.in">www.youmart.in</a></td>
<td><a href="http://www.firstcry.com">www.firstcry.com</a></td>
<td></td>
</tr>
</tbody>
</table>

Site developers should understand that search feature inside an online retail website is very important as the users are visiting the site with a product in their mind while searching inside their website which implies that there is a high probability in conversion of search into purchase. Marketers should make sure that their site has the best search experience to appeal to the larger segment of customers and it should serve as a competitive advantage for many websites from its competitors. Marketers may develop relevant marketing programs, customized digital banners, retargeting adverts from the on-site search data of customers.

**Conclusion**

Site search is very important in terms of e-commerce websites because there are many e-commerce websites in India at present which are trying to differentiate themselves from their competitors continuously. Marketer of e-commerce website should always strive hard to provide the best user experience in their site. This study was focused on elucidating the present status of e-commerce websites in area of site search experience in terms of five categories of best practices of site search to showcase the scope of improvement in site search.

It is very well known that Google is the famous search engine for searching about any information in India and its search results are loaded within fraction of seconds even though its web crawlers has to scan all the websites across the globe in a short span of time and provide accurate search results to the users. In contrast to web search, it is very difficult for e-commerce website customer to search for a
product which is already listed in the website. It is better to provide a good on-search experience inside an e-commerce website because Google and Twitter have introduced ‘buy’ buttons for online purchase which will transactionalize search and thereby reduce site visits as they can locate the product easily in Google itself. For any offline retailer store experience plays a vital role in attracting the customers, similarly online retailers should provide better site experience with the good onsite search features.

From the above findings it is evident that most of the e-commerce websites have long way to go in terms of optimizing their onsite search experience. Site developers, retailers and marketers should put in more efforts to offer a comfortable onsite search experience for a customer visiting their website. This research can be further extended by studying the site search behaviour of customers and also compare site search features among e-commerce websites with different business models. This study brings to light the significant missed opportunities for most of e-commerce websites.

References

ANNEXURE 1. List of online retail websites observed for the study