excentos

WHITEPAPER GUIDED SELLING

HOW ONLINE SHOPS AND BRAND WEBSITES ENGAGE WITH THEIR CUSTOMERS THROUGH PRODUCT RECOMMENDATIONS AND ACHIEVE HIGHER SALES

Including a checklist and success factors to optimize product search

ABSTRACT

This whitepaper describes product search and product advice requirements of consumers that search for products on the internet. It shows, how online shops and brand websites can use their product search and product recommendation tools to acquire and engage customers, in order to effectively increase their conversion rate as well as long-term sales. The added check list emphasizes success factors and helps website operators to enhance their product search and product presentation in such a way that website visitors are actually turned into confident buyers ensuring a better shopping experience.

1 Motivation and summary

How do online shoppers search for products and make their buying decisions? How can website operators use appropriate methods for product search and recommendation to acquire and engage with potential customers?

Previously, online shoppers used the internet primarily to find cheaper prices for products they had already decided to buy. Now, shoppers especially browse the Web prior to making a purchase decision to find information that helps them decide which product to buy. The need for advice and preselection remains so that product recommendation in brick and mortar stores has to follow them onto the interet. The question is: How can website operators meet the needs of consumers to enable them to make purchasing decisions online?

The whitepaper published by excentos, "Guided Selling: How online shops and brand websites engage with their customers through product recommendations and achieve higher sales", analyzes current search methods in terms of their suitability to support purchase decisions.

Key findings of the study are:

1 Traditional text search is required in every website and is perfect for searchers that already know exactly what they are looking for and know the correct terms to use in the search field. However, this only applies to around 20% of visitors.[1]

2 Category navigation is a necessary, basic tool for the layout of products on websites. However, the rigid hierarchical structure of the categories makes it difficult to browse large ranges of products, and users have no support when selecting products.

3 Faceted search is a good and efficient search tool that can be recommended for large product ranges and provides users with a more refined choice of products. However, users must be able to define concrete product characteristics or even technical requirements before making a search. In addition, the rigid filtering based on selected attributes of the product provides leaves the searcher with none or a much smaller list of results, and frequently leads to empty results fields and aborted searches.

[1] Retail/E-Commerce Industry Report Q1 2010

On the whole it has been ascertained that the widely used search methods are inadequate for the provision of expert advice to customers or for playing an active role in the purchase decision. Online shoppers are not guided through the purchasing process and frequently abandon their searches. This is how significant sales potential is simply given away in e-commerce.

The common search methods only partly fulfill the growing demands for improved usability and a better shopping experience. The common search methods are also often counter-intuitive to the natural search and decision-making behavior of consumers.

Guided Selling is both a method and an internet technology that combines product recommendations with product searches and thereby provides better support to potential buyers in the purchase decision process than do common search methods.

The checklist of success factors helps website operators to improve their product comparison tools, product recommendations and product presentation that allows them to provide a good shopping experience.

This whitepaper is targeted at website operators (such as online shops, product manufacturers, solution provider, special-interest portals and price comparison websites), analysts as well as experts in the fields of e-commerce, marketing, user experience and usability, and conversion optimization.

The publisher of the whitepaper is excentos Software GmbH, a specialist in Guided Selling Systems from Potsdam (Berlin area), Germany.

Contents of the Whitepaper

Following the introduction (chapter 2), the expectations that internet users have when it comes to product searches and product recommendations are initially explained (chapter 3). The existing search methods are then analyzed in terms of their suitability for online purchasing decisions, and the need for more online advice is assessed (chapter 4).

Chapter 5 delves more into how sales and advisory processes controlled by Guided Selling technologies are represented on the internet. As a practical aid, website operators can use the checklist in chapter 6 to determine whether or not they have already sufficiently optimized their search and recommendation applications.

Finally, chapter 7 describes the development potential of Guided Selling and its significance for the future of e-commerce.

2 Purchase decisions take place online

The majority of all purchase decisions are researched online

Today, most purchase decisions are researched on the internet.
Online shoppers make targeted searches for information and advice in order to obtain recommendations of products that meet their requirements.

The internet has become the first point of call when searching for information about products. The majority of all purchase decisions are already researched and/or carried out online: of the around 43 million German internet users[2] most (97%) now use the internet for product searches.[3] They do not only search for information: 75% of all German internet users have already bought something online. The number of regular online shoppers is increasing, while the number of non-online shoppers is shrinking.[4] Also, the recent W3B Study by Fittkau and Maas has made clear that the internet with 88% of the users represents by far the most recent medium to prepare a purchase decision:

Where customers research their purchase decisions in Germany
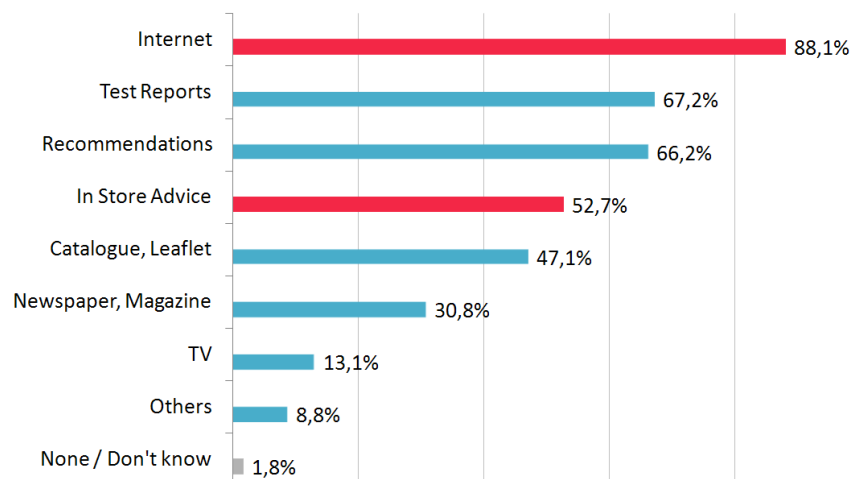
ill. 1: Wo Nutzer ihre Kaufentscheidung vorbereiten. W3B-Studie von Fittkau & Maaß, Stand April / Mai 2010

The internet has a high level of influence and it's growing further

The influence of traditional media on consumer decision-making has now shifted to the internet. According to the Digital Influence Study, the internet is the most influential medium in Germany with an index score of 40%, compared to 22% for TV, 13% for

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2   German Association for the Digital Economy (BVDW), Digital Insights – Online Usage (Jan. 2010), p. 3; The number of internet users is based on all 14 to 69 year olds

3   ACTA-Studie (Allensbacher Computer and Technology Analysis) 2009 (21.10.2009) p. 3 and p. 27

4   Digital Insights E-Commerce Study (11.12.2009) by BVDW, p. 3 estimates the number of online shoppers at 32.5 million

radio, 14% for newspapers and 11% for magazines.[5] Even when it comes to products that traditionally require an in-person inspection before purchase, the internet has gained considerable influence.[6] Information gathered from the Internet is prefered the information derived from a shop dealer[8].

As before, well-educated consumers with a high level of earnings are over-represented among internet users: households with a net monthly income of more than €3,000 account for just 33% of the population but are responsible for 41% of online purchases.[7] Around 89% of internet users in this potent income bracket make purchases online.

Expectations are high for website operators

The demands of internet users increase as they gain in experience. A well-structured website with an attractive product range is no longer enough to interest customers. Users want to be able to see all relevant information at a glance, and also to be assured that there is significant added value compared to competitor products. Having had a bad Online-Shopping-Experience at a brand's online representation, 52% of the „smart Internet Users" would substitute a brand even in the traditional retail store[8].

According to *Fittkau and Maaß*, the majority of users go straight to the shop in which the product will subsequently be acquired (42% of users, compared to 28% of users who access via text search). In other words, almost half of all shop visitors that search for products already have strong purchasing interest. These numbers indicate that investing in good search functions is important to turn those self-motivated shop visitors into confident buyers.[9]

Effective search tools and support in making the purchase decision represent considerable added value for the online shopper:

| Around 40% of users go direct to product search after entering the site.[10]

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5 Digital Influence Study, June 2008

6 For example, when consumers plan to buy a car the most important sources of information are dealer interviews and the test drive (90% of those surveyed) followed then by the internet (79%). However, the influence of the internet on the purchase decision is higher (21% of those surveyed) than that of the dealer (17%). Source: Study by Yahoo and Progenium, published in internet World Business 13/09, June 2009

7 Digital Insights E-Commerce Study by BVDW (11.12.2009), p. 9 and ACTA 2009

8 Forrester Research, Smartphone users study for demandware.com

9 W3B study by Fittkau and Maaß, see internet World Business from 05.07.2010

When search functions disappoint, however, 80% of users immediately leave the site.[11]

What's even worse for the website operator: 79% of the disappointed users do not come back to the website but go to rival sites.[12]

Website operators therefore seek new solutions that improve their product presentation, provide better support for decision-making and thereby increase customer satisfaction, conversion and sales.

3 Expectations of online shoppers

Online shoppers use numerous sources to help them decide what to buy: search engines, online shops, manufacturer websites, price comparison sites and special interest sites. Manufacturers' sites are now used just as much for product research (53% of users) as test and opinion sites and almost as much as price comparison sites (55% of users).[13] The internet has long not just been used to find the best price; it is now used for comprehensive research prior to making a purchase decision.

Online shoppers are often not satisfied with the search and recommendation services on a supplier's website, however. They expect the following information to help them come to a decision:

Relevant information and efficient search tools
The option to select products according to their attributes is one of the most-requested functions for convenient shopping.[14] However, only 51% are satisfied with the relevance of the search results.[15]

Appealing product presentation
Online shoppers want an appealing, clear and easy-to-understand layout of the product range.[16] Users often criticize overly complex navigation and overloaded content, and expect clearer functions and more support with online shopping.[17]

Convenient online shopping
One reason why online buying is popular is that it is convenient. Convenience is more important to consumers even than price, and relates to the entire process

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10 Marketing Sherpa: How to Improve Your Site's Search and Lift ROI – 9 Strategies and Tips

11 Jupiter Media Metrix: Search Technology: Resurrecting The Web's Workhouse.

12 Forrester Research, Ecommerce Website Performance Today: Consumer Reaction to a Poor Shopping Experience (August 2009)

13 ACTA-Studie (Allensbacher Computer and Technology Analysis) 2009 on internet usage trends (21.10.2009) p. 28

14 See e.g. digital media center study: "Is the customer king?" which asks: which functions are desirable for convenient shopping? 2008, p. 4

15 digital media center, study: "Online Shopping 2007", p. 4

chain, beginning from the product range, product search and recommendation through to payment options and delivery times etc.[18]
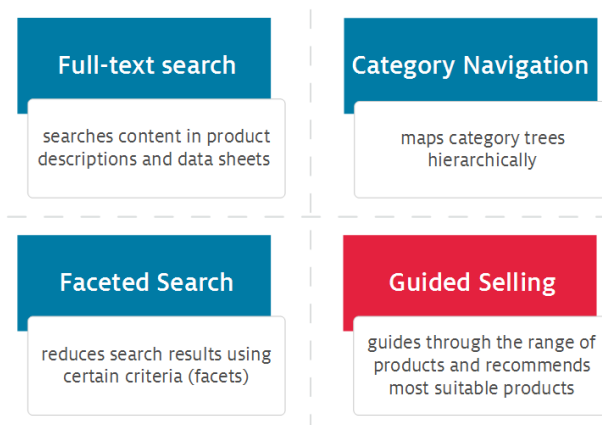
A study by dmc (digital media center) also found that consumers not only expect support from online shops to help them to decide what to buy but also from brand websites, which are cited as the most important source of information about the products of well-known brands. Around 70% of users want "best information" and "expert advice" from such sources. [19]

Product search and recommendation tools currently used by manufacturers and online shops often do not fulfill these requirements, as they do not make the user feel they are making a secure purchase decision. As a result valuable customers are lost because they are unable to find the products they wanted and abandon their search before it had even really begun.

4 What conventional search methods are unable to provide

*The most important concepts for Guided Selling Systems, online product recommendation and product search as well as conversion optimization are explained in the online **glossary** for product search and product recommendation at excentos.com*

Next to Guided Selling there are three conventional search paradigms or search tools that online shops and manufacturer websites have established:

Full-text search
searches content in product descriptions and data sheets

Category Navigation
maps category trees hierarchically

Faceted Search
reduces search results using certain criteria (facets)

Guided Selling
guides through the range of products and recommends most suitable products

ill. 2: Paradigms of product search, excentos Software GmbH, September 2010

Free text search provides a direct and fast search for certain products or product attributes. It is useful for customers that already have an exact idea of what they are looking for.

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16 User friendliness and navigation are among the most important success criteria for online shops. EuPD Research, 2007 as well as Facit Digital / Plan Net 2008

17 digital media center, study: User expectations for online shopping 2007

18 Trends and developments in B2C e-commerce, survey by TU Dresden of e-commerce experts, 12.01.2010

19 internet World Business: Brand websites without an online shop disappoint customers, 11.01.2010

Category navigation hierarchically organizes individual product categories and characteristics, starting with general main categories and moving down into sub-categories that branch off from the main categories. The list of results is filtered according to the sub-category that is selected.

Faceted search enables search results to be refined by the selection of options ("facets")[20] set by the website operator.

The following example of a purchase need illustrates a typical product search process on the internet and highlights the problems that regularly emerge with conventional search methods. This is followed by the **requirements for successful online advice:**

> **Example of a purchase need:** Felix wants to buy a snowboard. As Felix has previously taken part in skiing, he knows that his height (6 feet) and his ability (beginner) will probably play a role when making a purchase. He has never bought a snowboard before, however.

Felix tries out all the most widely used search methods in order to find a suitable snowboard:[21]

4.1 Free text search
Felix enters the following free text query in the search field of an online shop:

| snowboard | Search |

He receives a long list of all items that include the term "snowboard". As well as snowboards, other products are also provided: snowboard books, snowboard bindings and t-shirts from snowboard brands (see ill. 3). Images of some items appeal to him more than others, so he browses through this range and sees if he can further refine the search results based on these items.

If the online shop does not provide after-search navigation (e.g. faceted search, see chapter 4.3), there is no option to refine the results further based on the purchase needs. The results can often only be sorted by product name (which does not help with a purchase decision) or price (very bad for shop operators).
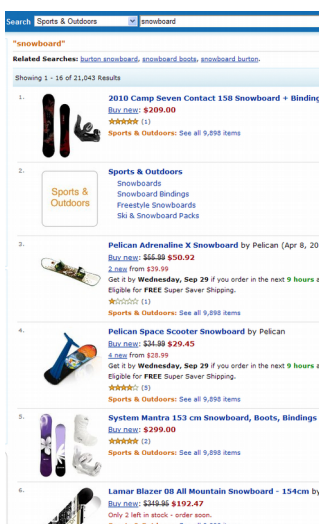
ill. 3: List of results from Amazon.com for the search term "snowboard"

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20 Examples of facets: price, manufacturer. colour etc.

21 Screenshots are taken from the respective websites to illustrate search examples and are not complete and might not be consistent with the current website content.

Felix now attempts to enter a search enquiry that better expresses his purchase wishes:

| snowboard for men, 6 feet, beginner | Search |

There is one snowboard that is described as having a "length of 6 feet". Felix had searched for his height, but the product description is based on the snowboard length. However, in order to calculate this, information about height, sex, technique and ability are required. As snowboards should be typically 10 to 20 cm shorter then body height, Felix risks selecting a **board that is unsuitable for him** by using the text search.

Assessment: Text search is a necessary component of every website and is very useful when the user is able to provide the exact terms for what she or he wants. It is not suitable for general product terms (e.g. "snowboard for body height of 6 feet") as these cannot be translated into concrete product attributes. In addition, text search is unable to provide a systematic guidance through the buying process as it can only search using terms that the user already knows.
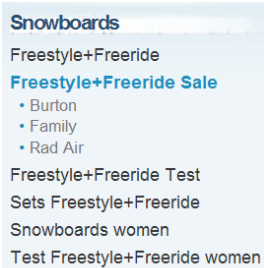
Text search is therefore only partly able to support consumers in their buying decisions.

4.2 Category navigation

Felix next attempts to find a suitable snowboard with the help of category navigation:

Category navigation is the most widely used search tool, and Felix thus knows intuitively how he should use it. He enters his purchase requirements (attributes selected by him are in **bold and underlined**):
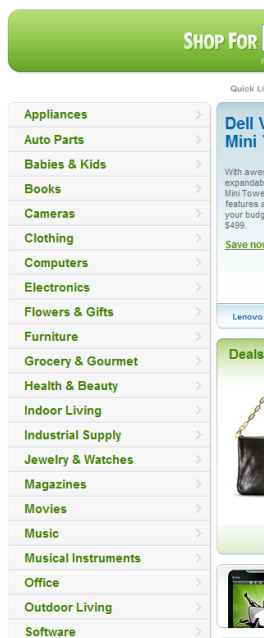

ill. 4: Category navigation in Europe's biggest snowboard shop bluetomato.de

```
+ Sportjacken
- Snowboards
  - Freestyle-Boards
   - für Männer
    + Atomic
    - Burton
    + F2
    + Rossignol
    + ..
   + für Frauen
```

```
        + Racing-Boards
        + gebrauchte Testboards
        + Neuheiten
+ Helme
```

Category navigation is an information model and a search method whereby products are allocated to one or several categories. There are hierarchical relationships between categories and sub-categories.

One particular problem of category navigation is the "Category War" that results from unclear allocations or sequences in the search tree hierarchy.

Category navigation has successfully refined the search results down to various "freestyle boards" for "men" made by "Burton". However, Felix cannot judge whether he needs a freestyle board or which of these boards is suitable for him.

Second-hand test boards could also be a possibility for Felix. But the hierarchical categorization also fails here as it is limited to just one default search path. If Felix wants to view these products he has to start the search query again and loses all his previous entries. Category navigation can never fully reproduce the intuitive search behavior of customers. With large product ranges this often leads to usability problems as the finding and retrieval of certain products quickly degenerates into unwanted "brain jogging", and many clicks are required in order to get a result. The biggest disadvantage of category search is its inflexibility:

| Category navigation quickly becomes unmanageable with a large product range

| Shoppers are forced to make "rigid and single" choices: multiple selections are not possible.

| **"Category War"**-Problems caused by unclear category allocation

| Hierarchical design forces certain search behavior and can also require users to start the search from scratch if they want to change an entry (Restart Problem).
In principle the user must know the entire category structure before making the first entry.

| No personal contact with the customer

ill. 5: Faceted Search at pricegrabber.com

Assessment: Category navigation is the most widely used search tool and is essential as a basic element of page navigation.
It allows products to be organized by category, but a search for product requirements is not possible since category navigation cannot provide any advice or recommendations.
The rigid information model, the lack of an option to make multiple selections and the restart problem are counter-intuitive to the natural search behavior of the user.

4.3 Faceted search

Felix was also unable to find a suitable snowboard with category searching. Now he will test faceted search to see if that method can solve his search problem.

Faceted search (faceted metadata search) allows the selection of product attributes (facets) and the filtering of results according to the selected attributes. Faceted search mostly appears as a two-part user interface with search attributes generally listed on the left and the results provided on the right (see ill. 5).

Faceted search is often implemented as so-called g*uided search (or funnel search)*, as it provides only the remaining options based on the user's preselections. However, hiding out all other options conflicts with the user's intention to browse through the entire product assortment.

With filter search product attributes are shown first (such as the snowboard length) and the search results are then filtered.

The disadvantage here is that a snowboard length to the exact centimetre must be selected. The rigid filtering does not allow suitable alternative suggestions and only displays a small part of the product range that is actually relevant.

Filter search is also a type of faceted search whereby searches can be made based on product attributes. Filter searching generally takes place in two stages: In the first stage, the user has to select one or several attributes. Rigid filtering then only displays the products that meet all search criteria (ill. 6).

ill. 6: filter search at Snowlab.de

Advantages of faceted search: There are more product attributes for selection than with category navigation and the user can determine their own search parameters. In addition, product attributes are not set in any kind of hierarchy so that all product attributes can be selected at the same time and in whichever sequence is preferred. Users do not have to go through a complete search tree. Instead, they can combine product attributes in whichever way they like and change them at will. Different searches, such as multiple selection or search fields (e.g. price), can also be edited and a preview of the number of remaining products per facet is provided.

In contrast there are also possible **disadvantages of faceted search**:

| **Rigid filtering** of the results, whereby the selection areas cannot be put into separate price brackets (e.g. products from €300 to €400), for example.

| **No alternatives** are provided when there are only slight divergences from what is available – this rules out further sections of the product range from the start and unintentionally **reduces the list of results –** the investment in a larger product range is then not leveraged by the search method.

| By using **guided search**, which hides facets that are no longer relevant, **the user filters results according to local optima**. Products that match in principle but potentially deviate from the optima are ruled out early on, and this reduces the range that is provided. This also reduces the likelihood that a purchase will be made, and any upselling potential is lost.

| **No reasoning for search results** or lack of confirmation of the searched product attributes.

| Difficulties in the **identification of relevant facets**

| There is **no advice** provided **–** searches are carried out based on the technical attributes provided in the product data sheet, and generally do not recognize requirements in the way that they are normally described by customers

> **Assessment:** Faceted search is useful for limiting the list of results and for fast and simple navigation through large product ranges.
> However, product attributes are not explained and purchase requirements are not translated into product characteristics. Faceted search is therefore largely suited to users that have a relatively large amount of knowledge about the product they want or who are already convinced of its suitability.
> Problems of this method include the rigid filtering and lack of ability to compromise, whereby customers are only able to actually find a small section of the product range in question.

4.4 Statistical Recommendation Engines

Statistical recommendation engines are technologies for **automated product recommendation**. This kind of recommenders grab Informationen out of a statistical database of historical usage data in order to calculate suitabale products for a recommendation which might match to either the user or the shown product.

Unfortunately, the collected historical **usage data** does **not necessarily** lead to **verisimilar product recommendations**: Often, unsuitable products are recommended, simply because a single user has bought these in combination before (compare below).

Therefore, in order to obtain a reliable and verisimilar recommendation, **it is necessary to have a lot of traffic within the shop** and to analyse huge amounts of usage data before good recommendations can be made. It is obvious, that convincing factors are missing here – i.e. **comprehensible recommendations via personal reasons**, why a product is especially suitable.

4.5 Conclusions
The widely used search methods of text search and category navigation are irreplaceable components of every large website and are mainly suited to search-oriented use cases. Faceted search with its clear ordering of product attributes is an efficient tool for refining the search results for large product ranges.

Free text search, category navigation and faceted search are not well suited for helping consumers to decide on which products to buy, however.

Direct **consequences of insufficient search and advice functions** are:

"He who finds nothing buys nothing"
Product search and recommendation are central elements of every marketing or transaction-oriented website. A user unable to find products that match his needs will quickly leave the site and switch to a rival.

I Expensively acquired potential customers leave the website because they have not found any suitable products or were not convinced of the benefits of products that matched their requirements

I Poor usability complicates product searches

I Poor customer satisfaction and a resulting poor customer engagement: danger of losing the customer to competition.

I Consumers only get to know a small section of the available product range

I Low sales conversion, and revenue potential are lost

I The potential of available content – product data, product images, marketing text – is not fully utilized.

I Lack of emotional contact / poor shopping experience

5 How Guided Selling improves product search and product recommendations

The previously discussed weaknesses of the established search methods lie in their inability to provide product advice or actively guide users through the search process. This means that online shops and manufacturers' websites do not realize their full sales potential. Website operators therefore require concepts and tools to support sales that combine product search with product advice and recommendations.

5.1 Definition and objectives of Guided Selling

Guided Selling describes a process whereby the potential buyer is advised about products and services throughout the entire decision-making process and is actively guided towards the final purchase**.**

Guided Selling Systems are software solutions that advise potential buyers, guide them through the product selection process and support the sale of the product. They increase customer satisfaction and support product sales.

An ***online product advisor*** is a Guided Selling System designed for a certain subject area that is integrated into a website and takes over search and advisory functions.

Objectives of Guided Selling:

I Guide customers quickly and easily to relevant products

I Model the purchase decision-making process
(from advice and the analysis of requirements to product information and the creation of new needs through to the acceleration of the purchase decision)

I Improve usability and findability

| Ensure the best shopping experience and service quality so that shopping is fun.

| Raise product awareness and brand exposure

| Higher customer engagement and competitive differentiation

| Increase conversion and online sales (revenue)

| Achieve upselling (higher shopping cart value)

5.2 Areas of application for Guided Selling Systems

Guided Seling Systems are Web-based tools for product search and recommendation and are used in the following areas:

| **Online shops and manufacturers' websites** as well as websites of service providers

| **price comparison sites** and **special interest portals**

| **mobile devices** (smartphones)

| **computer terminals in retailer stores** that provide product support for customers at the point of sale

| **Call-center agents** use Guided Selling Systems to support their telephone advisory services.

5.3 How Guided Selling leads to purchase decisions

In order to make clear the difference between an online product advisor and the previously described search methods (text search, category navigation, faceted and filter search), we will again use the purchase needs of Felix (see example of snowboard purchase from chapter 4). The reference for this will be the excentos-operated Snowboard Finder at Blue Tomato, Europe's largest snowboard shop.

Felix is able to launch the Snowboard Finder from various starting points of the website. As soon as the Product Advisor is launched, some products are presented to Felix that are optimized according to typical buyer preferences.

Felix can enter all attributes relevant to the purchase decision into an easy-to-use input widget that dynamically adapts itself to the respective purchase decision. The Advisor explains the product attributes (e.g. riding style) as well as special features and different variants.

Following every user input the requirements profile is further refined and matched to every product profile in order to provide a ranking of suitable products. Felix receives immediate feedback in the form of a highlighted top recommendation when he changes anything. This uncomplicated process motivates him to check out a few other

Advice as if from a specialist sales person: The vision of Guided Selling is to provide customers with the same level of advice online that they would get from a live sales person and to match the shopping experience of the best high-street stores.

Guided Selling actively leads to a decision:

- *Requirements are assimilated and gradually refined*
- *The requirements profile is matched to all products in order to achieve a ranking of the most suitable products.*
- *The Reasoning explains pros and cons and provides a reason for the purchase recommendation*
- *Alternatives are proposed and explained where it makes sense.*

features. Felix therefore gets to know the product range and his personal requirements in a hands-on way.
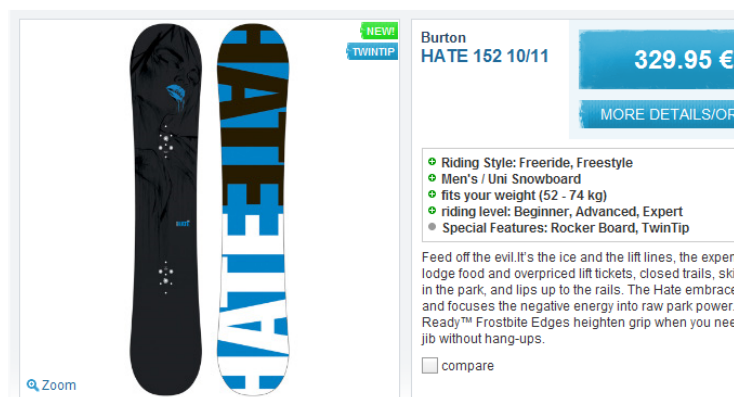
ill. 7: Highlighted Top Recommendation: the most suitable product is visually highlighted

Customer desires instead of technical data: The Snowboard-Advisor advises Felix about body size and weight instead of filtering by board size and degree of flex. Only a few shoppers are able to provide concrete technical data, which is why normal search systems often result in abandoned sales or even to buying mistakes.

The Snowboard-Advisor suggests important information that would be required for a matching recommendation, and Felix realizes here that body height and weight play a role. A tool tip explains how body size and weight dictate the product selection.

Felix finally receives a condensed selection of boards that are suitable for him. The Reasoning explains how the selection was made as well as the pros and cons of the displayed alternatives and a brief written out reason for their selection:

ill. 8: Product description in Reasoning form, Snowboard-Finder at Blue-Tomato.com

Illustration 8: The correct board length is calculated from body size, gender, driving style and ability. The Reasoning explains pros and cons so that the buyer learns something about the product range and gains confidence in the recommendation.

The Guided Selling System works out alternative suggestions by balancing individual requirements against each other and calculating the best matching product ("fuzzy search"). Guided Selling can even make intelligent use of demands that cannot be fulfilled or are contradictory. The ability of Guided Selling tools to compromise also

avoids the occurrence of empty results fields and ultimately abandoned sales (see ill. 9)

ill. 9: Alternative suggestion of a more expensive snowboard

Illustration 9: The alternative provided is more expensive than was requested by the buyer. But this is far better than providing an empty results list, which often leads to aborted sales. The recommendation of more expensive alternatives is a good sales tactic in any event. Consumers are usually prepared to spend more on a product if a cheaper product cannot fulfill their high requirements.

Felix is now able to judge for himself which product attributes are most important to him and how realistic his requirements are within the range provided. He learns about the different characteristics of the products and knows where he might need to lower his sights.

Upselling is possible where products exceed expectations or requirements. The Advisor supports upselling by actively suggesting further, alternative solutions. The customer is therefore introduced to areas of the product range with which he or she was previously unacquainted.

Assessment: Guided Selling enables the provision of online advice similar to that provided by a specialist shop assistant. Consumers are guided through the decision-making process and advised about their purchase objectives. Instead of filtering products out, products are ranked by their suitability and reasons are given for recommendations. Empty result lists are avoided as alternatives are suggested. The contextual advice allows upselling potential to be used.[22]

excentos has already demonstrated significant success in a case study together with online shop operator Blue Tomato:

Online buyers who arrive at the list of product details via the Product Advisor:

- *stay for 115 % longer in the shop*
- *Have a 56% higher shopping cart value*
- *-Have a 47 % higher goal conversion rate*

than users who come to the same product pages without the Product Advisor.

22 http://www.excentos.com/casestudy-bluetomato

6 Checklist and success factors: optimization of product search and product recommendation

excentos has compiled a checklist and success factors for website operators so that they can assess and optimize the performance of their tools for product search and recommendation. The checklist is based on numerous website analyzes and expert reviews as well as the evaluation of user feedback, user tests and user data from our case studies.

The following information could help to answer your questions:

| **Web Analytics**, particularly **analyzes of typical search queries and aborted sales**

| Feedback from your customers

| **Call center calls or sales discussions** following unsuccessful website searches

| Monitored user tests

| **Self testing:** Carry out some typical search queries and attempt to find suitable products for purchase without using prior knowledge.

OBJECTIVES	CHECKLIST AND SUCCESS FACTORS FOR PRODUCT SEARCH, RECOMMENDATION AND PRESENTATION	
Analysis / optimization	**Do you have Web analysis tools that you use to continually analyze the search-tool needs and requirements** of your site visitors?	☐
Analysis / optimization	Are you able **to optimize the product sequence in the results list in order to implement your sales strategy?** (e.g. high-margin products, new arrivals or stock clearance)?	☐
Product data	Do you have **meaningful product data that is structured well enough for use in search tools?** Tip: invest in a flexible and high-performance PIM (Product Information Management system). Data sheets that can only be displayed but not used to compare products or in search tools are not sufficient.	☐
Product presentation	Present a **selection of product images.** Are you able to embed **rich media content (e.g. enlarged pictures, zoom images)?**	☐
Product presentation	Do you have **meaningful product names, clear and understandable brief descriptions** as well as a **preview of the most important product features in the results list?** This provides a quick overview of the differences between the products.	☐
Product presentation	Do you ensure that the results contain **not too many but not too few recommendations and highlighted top recommendations** to give the user sufficient information to come to a decision?	☐
Product presentation	Are **reasons provided** for the search results or product recommendations? Tip: Convincing reasons increase trust in the website and therefore raise the likelihood to buy.	☐
Search	Do you provide tools to cover both **free text and navigation-based searches**? Tip: Integrate free text and navigation-based search so that users are able to start with a free text query and later refine the recommendations with guided advice.	☐
Search	Are online shoppers able to sufficiently **limit** the **search results** to their purchase requirements and also freely **combine** several criteria?	☐
Search	Do rigid filtering and multi-branched category trees cause empty results lists and search blind alleys? Tip: test what circumstances lead to empty results fields.	☐
Search	Do the **selection options make sense and are they explained in layman's terms** to enable the buyer to reach a decision more easily? Tip: Carry out tests with users who have never bought a product from this category.	☐
Guidance / findability	Are product searches **interactiv**e so that only **relevant questions and selection options** are displayed for each search query?	☐
Guidance / findability	**Are all products actually possible to find? Are long-tail products also findable**? Are **products with data gaps** also findable? Tip: Carry out test searches of a few samples. Think of unusual scenarios in order to cover all user	☐

OBJECTIVES	CHECKLIST AND SUCCESS FACTORS FOR PRODUCT SEARCH, RECOMMENDATION AND PRESENTATION	
	groups.	
Guidance / findability	Are your **search tools well advertized and easily findable**? Tip: Provide search tool teasers not only in one entry page but also in several different contexts so that users are guided to the product search in every area of your website.	☐
Usability	Are users able to **change requirements that have already been provided** without having to restart the search? Tip: You avoid search blind alleys and abandoned sales if users can change requirements at any time and have an overview of what they have already selected.	☐
Usability	Do you have an **easy-to-use and clear product comparison tool and a wish list**? Tip: Test if every user is able to place products in the comparison tool and gain a product-comparison overview.	☐

7 Outlook: How Guided Selling changes the future of product search

The more that buying decisions shift to the internet, the greater the demands will be on product search and recommendation tools. With Guided Selling companies are reacting to and shaping fundamental trends in e-commerce:

Even more targeted online decision: The targeted search for information and the increasing use of advice and decision-making support will replace pure price searching. Consumers want to make more targeted research for their buying decisions by using internet services and therefore expect more efficient search tools.[23]

> *Guided Selling technologies focus on decision-relevant product information and provide targeted support for users when they are preparing to make a purchase.*

Emotional shopping experience: Shopping should always be fun for the customer! Purchase decisions on the Web are also psychological processes in which expectations and social norms play a large role. As the lines blur between searching for products offline and online, suppliers must learn how to appeal to emotions and convey values online.

> *Guided Selling Systems place value on usability and the joy of use in order to make product recommendations more interactive and realistic and product presentations more exciting. Rich media content and interactive input widgets support the shopping experience.*

Integration of sales channels and growing online revenue: Multi-channel providers will increasingly link their online activities with traditional sales media. At the same time there will be a strong increase in pure online players. Manufacturers will increasingly sell more online.[24]

For example, manufacturers could pass leads gained through online advice to dealers in order to convert website leads to sales and support the downstream sales process.

> *Guided Selling's approach is to integrate the entire purchase decision-making process including the sales channels into the advisory service.*

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23 "I would like more online shops to be configured and personalized based on my needs" was the second most-cited wish of 36% of those surveyed. digital media center, study: Shopping Trends, 2008

24 76% of users are disappointed when brand websites do not provide a shopping option. digital media center, study: Brand websites 2008, p. 6

Social shopping and mobile commerce: User ratings and user-generated content play an increasingly bigger role in purchase decisions. Brands, products and purchase decisions are discussed and researched in social networks (on- and offline) and are also evaluated following the purchase. Mobile devices are also increasingly used for this purpose, so it is to be expected that the lines will blur even further between product search and recommendation on the internet and on the high street. It will then become important to enable product recommendations to "follow" the user.

> *Guided Selling solutions are also now available for mobile devices (smartphones). The results of an advisory session can be remembered, commentated on and reused in a social media network.*

Personalization and diverging target groups: The number of internet user groups will increase and become more heterogeneous since all age, income and education levels are online. At the same time, consumers expect relevant information for their target group and buying behaviour only. Only offering static content that is identical for all users will not be sufficient.

> *Guided Selling allows a modular and flexible adjustment of search and advice behavior to different target groups. The shopping information, buying arguments and level of (e.g. technical) details displayed will adapt to the user's needs in order to present the relevant information at the right time.*

Ongoing optimization: Website operators will leverage usage data and consumer insights more efficiently to optimize their offering. Product ranges, market positioning, target group approaches and recommendations can be tested on an ongoing basis and adapted to quickly changing requirements.

> *Guided Selling Systems assess the usage and purchase processes in Web Analytics Systems. The data also includes reasons and motives for customer purchases and is therefore very valuable for further consumer insights, marketing communication and sales strategy.*

8 Contact and company details

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excentos Software GmbH develops web-based recommendation technology for Guided Selling. The goal of excentos is to ensure that shoppers get the same service quality from online product search and product recommendation as they do from the best specialist sales person.

excentos Product Guides help online shops and brand websites to provide compelling sales arguments for consumers through individual product recommendations, thereby increasing customer satisfaction and sales.