

How Indexes Support Good Information Scent

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Information foraging is a theory which describes adaptive strategies users employ to find information. Information “scent” is the idea of using environmental cues to reinforce information the user is seeking (Pirolli, 2003). This idea is what helps the user know if they are going in the direction towards their information goals, or if they need to back up or begin their search over. Think of it as the game of “hot and cold” applied to information seeking behavior.

The strength of information scent could be described as the level of confidence the user has regarding if they are on the right path to their information goal. The length of the path is less important than if the user thinks they are going in the right direction and will eventually find what they are looking for (Porter, 2003). This debunks the “three-click-rule” which is popular in many web design circles as a design philosophy. The fear is that the user would become frustrated and give up looking for something after 3 clicks, and so many information architectures and navigation schemes are developed around this rule. In reality, as Porter shows in his study, the user is more frustrated by unsuccessful searching than the actual number of clicks it took them.

As a design pattern, content indexes on the home page are a useful way to reinforce scent before a user has to make a decision to click. Indexes are the first level of reinforcing information scent during information foraging. Labels activate the user's memory about a concept and retrieve information necessary for decision making. The additional information provided by indexes reinforce a concept by spreading activation (Anderson, 2000) to related terms, broadening the association of a concept within a specific context. This is very useful for information which may be ambiguous in meaning, specialized and technical, or very broad in many senses but specific to this context. In usability testing, I have often heard users describe indexes as “previews” to section content because they provide them with enough information to help them decide if that is the direction they want to go.

Although there are some great benefits for information foraging with the use of indexes, they are not always the most appropriate design pattern to implement. Some content can not easily be displayed visually because of its structure or context. The content organization may be clear enough for target users and the home page can be utilized for other goals such as product highlighting or news items. Other design patterns such as tabs may be more effective at building a usable mental model of the site. There is also the danger of using indexes as a crutch to support poor labeling and organization. As with everything which involves information, especially on the web and for specific audiences, the use of indexes as an aid in information foraging is contextual and other factors such as audience, site goals, information structure, scalability, and so on, must be taken in to account.

References:

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