

# OFFER RETRIEVING STRATEGIES ON A COMMERCIAL WEB SITE

## *An Exploratory Research*

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**Abstract:** After presenting the concept of offer retrieving on the Internet, the present paper explore via a qualitative study the different strategies used by the consumer to retrieve a product on a commercial web site and the role of familiarity in the determination of such strategy. Our results show that individual ability to retrieve the offer on a commercial Web site would depend on the adopted strategy and on the Internet familiarity level. Confirming the idea according to which there is a narrow link between the usability and offer accessibility on an e-commerce site.

## 1 INTRODUCTION

When consumers visit Internet shops intending to make a purchase, many of them don't complete the transaction and abandon their intention prematurely (Cho 2004).

Three main reasons lead the Internet users to abandon their on-line purchase processes prematurely: technical problems met on the site, refuse to give their credit card number and the difficulties met on the site to retrieve the product (Shim and al. 2001; Lee and Lee 2005; Markellou and al 2005). In the same vein, Ranganathan and Grandon (2005) cited that 43% of attempted online purchase failed because the consumer either had trouble finding the product on the Web site, or electronic checkout process has made the purchase too difficult to be complete.

Indeed, problems connected to the navigation and to the offer retrieving within a site seem to be an important obstacle for on-line purchasing especially for non-experts (Hoque and Lohse 1999, Nicholas and al. 2003, Zhou and Bao 2002, Callahan and Kohenemann 2000, Nielsen 1997, Zhang and Myers 2005).

This research aims to explore the product retrieving strategies used by consumer on a commercial Web site and the role played by the Internet familiarity in the adoption of a specific strategy. The question is to verify if different Internet familiarity levels lead to the use of different strategies?

To answer this question we had realised a qualitative study with 29 business school students. We present in that follows the methodology adopted during this study and we discuss our main results.

## 2 THE METHODOLOGY

The objective of this research was little investigated, thus, we are in a context of discovery. An inductive and qualitative research approach seems to be more suited.

## 2.1 Investigation Procedures

In order to reach our research objectives, we realised a study in which we asked a group of students to buy a product (a book of service marketing or a strategy pc game) on the site Amazon.fr (The participants stop their purchase process just before giving their credit card number).

The data collection was realized through three methods:

- *The verbal protocol*
- *Semi-directive interview*
- *The navigation video recording*

## 2.2 The Sample

Our sample is constituted by 29 business school students whom were contacted during their presence at the ISG of Tunis and having demonstrated some interest for our search.

## 2.3 Analysis Process

*Protocols Analysis:* Despite the different taken guarantees, the quality of verbal protocols, we had not the possibility to benefit from verbalization of several individuals for two main reasons.

The first was purely technical and caused by the interferences between the computer and the recording equipment which damaged the quality of the recording. The second reason is that some individuals were so immersed in their process of navigation that they forgot to verbalize their thoughts, in spite of reminders. This situation would be caused by flow experience.

*Semi-structured interview analysis:* We proceeded first to the transcription of the interviews audio recording. In the second stage, we proceeded to an inventory by themes for every interview, then in an analysis of the contents by theme and by individual.

The analysis of interviews contents also allowed us to have an idea on how individuals conceptualize their product retrieving strategies on a commercial site and on their internet familiarity.

*Navigation recording analysis:* The works of Moles and Rohmer (1977) and those of Sébillote (1988) were used as a theoretical basis in the analysis of the navigation recording. Actions accomplished by the participants during their navigation on the site were classified in to three

generic categories: the click actions, the reading actions and the writing actions. These generic categories were divided in several sub-categories.

In the light of these categories we proceeded to a sequential description of activities realised by every individual during the navigation. We make then a census of the various types of activities as well as in a sequential schematic representation of these activities.

The data obtained allowed us to have the information necessary for realizing our objective of identification of the product retrieving strategies on a commercial Web site, as well as evaluating the efficiency of a given strategy.

## 3 RESULTS AND DISCUSSION

The analysis of the interviews and navigation recordings allowed us to identify four variables and to have a first idea on the types of relationship among them. These variables are the Internet familiarity level, the conceptual mode of the product retrieving strategy on a commercial Web site, the product retrieving strategy and the strategy efficiency.

### 3.1 The Internet Familiarity Level

Further to the analysis of interview, and inspiring from Villareal-Camacho's (1985) works on the computers familiarity, three levels of familiarity were identified, 14 of the participants have a weak Internet familiarity, 11 a medium and only 4 a high familiarity.

### 3.2 The Conceptualization of Retrieving Strategy

The analysis of interviews allowed us to gain deeper understanding of the way the participants conceptualize their retrieving strategies. Two great modes of conceptualization were identified that allowing divide the participants into two groups:

**Group 1:** The individuals of this group used their Internet knowledge during the conceptualization of their strategy. Even those that had visited the site for the first time didn't consider themselves in front of a totally new situation: they compared the site with a classic search engine and act in consequence. So, it is possible to say that individuals of group 1 proceeded to an analogy knowledge transfer. In the

case of lack in knowledge needed for a given situation (purchase on amazon), analogy use nearby situations knowledge (information search with a search engine) and operates the necessary corrections (Bastein 1997; Gregan-Paxton and John, 1997).

**Group 2:** The individuals of this group considered that they were in front of a new situation and admitted to be totally driven by the site and by the specific category links present on the site. In every stage, they look for links susceptible to allow them to reach their purposes. In case of failure they often return to the starting point and look for another link.

Another type of reasoning takes place for this group. It is about a confrontation between the category schemata they possess (cognitive representations) and those proposed by the site (the hierarchical links structure).

### 3.3 The Offer Retrieving Strategies on a Commercial Web Site

We are interested in actions operated by the individual to retrieve the offer: what does he click? With which frequency? And in which order? So by using the navigation video recordings analysis, we identified four types of strategies which appear as follows:

- **The pure search strategy:** it takes place when the individual use only the search tools (4 individuals)
- **The pure navigation strategy:** here we consider the strategies which are totally based on links use (7 individuals).
- **Mixed strategy:** In this case individual use both category-specific and site search tools (9 individuals)
- **Search dominance mixed strategy:** it is an intermediate situation between the use of the pure search strategy and the mixed strategy. In this case the individual begins, by using the first level of categories links to delimit his search (example click on the link video games) then pursues his task using search engines ( 9 individuals).

The strategies presented above are in perfect agreement with those presented by Nielsen (1997), except for the case of the mixed strategies which are subdivided into two subcategories.

### 3.4 Study of the Strategy Performance

Within the framework of our study we are interested in the measure of the strategy effectiveness, which is the capacity of the individual to reach expected objectives. We consider the capacity of the individual to make at least a fruitful search (his capacity to succeed at least once in identifying a product corresponding to his objective).

### 3.5 Study of Variables Links

Given the narrowness of our sample (29) we had no appeal to statistical tests and we just observed the general tendencies of every type of relationship through simple cross tables.

At first, we investigated the relationship between the Internet familiarity and conceptual mode.

Our results indicate that 75 % of the persons having a high familiarity adopt a conceptualization of the strategy based on analogy knowledge transfer, while a majority of the persons who have a weak (85%) or medium familiarity (81%) opt for a conceptualization based on the site and the links.

These results are in perfect agreement with Navarro-Prieto's and al. (1999) works on the information search cognitive strategies and those of Gregan-Paxton and John (1997) dealing with learning by analogy.

Secondly, we investigated the relationship between Internet familiarity and adopted strategy and between the conceptual mode and the adopted strategy.

Only 50 % of the persons possessing a weak familiarity (7 on 14) succeed in making a fruitful search. This number increases for the persons who possess a medium familiarity (7 on 11) and reaches 75 % for the persons with a high familiarity. So, the probability of strategy effectiveness increases proportionally to familiarity level. This result joins Hsieh-Yee's (2001) and Zhou and Bao's (2000) idea according to whom a minimum of ability is required to realize tasks successfully on Internet. They are also in accordance with Kim's (2001) results proving that novice searchers retrieved information more slowly and made more errors than experienced searchers.

Our results indicate also, that strategy effectiveness is contingent to the category of used strategy (100 % success for the search dominance

and 11 % for pure links). This result was predictable. Researches as those of Smith and al. (1997) and that of Choo and al. (1999) indicate that on the Internet, different tasks require different behaviour to be realized effectively.

So, the general tendency of our results seems to reveal that familiarity don't have a direct impact on adopted strategy type. However, Internet familiarity could have an impact on the conceptual mode; this last one should have an impact on the adopted strategy type. The performance of the offer retrieving depends on adopted strategy type and on familiarity level.

#### 4 CONCLUSION AND FUTURE RESEARCH DIRECTORIES

Our research aims to investigate the various consumer product retrieving strategies used on a commercial Web site for different Internet familiarity level. To reach this objective we realized a qualitative study with 29 Internet users.

The research shows some general tendencies which should be verified through a wider sample within a confirmatory study.

Internet familiarity seems to have no direct impact on the type of adopted strategy, but it would exercise an impact on the conceptual mode which would influence the type of adopted strategy. This result emphasizes the importance of distinguishing between the cognitive part (conceptualization) and the behavioural (strategy) of offer retrieving.

Our study puts in evidence that individual ability to retrieve the offer on a commercial Web site would depend on the strategy adopted and on the Internet familiarity level. So, this study confirms the idea according to which there is a narrow link between the usability and offer accessibility on the site.

Therefore to improve commercial sites usability, it would be important for marketing practitioners to discover how it's possible to adapt the characteristics of sites to every type of strategy.

In other words the designers of sites should take into account users individual characteristics during the development of e-commerce sites.

So, if the results of the present search are verified with a wider sample, it would be evident that clear and simple category links as well as the presence of position and direction indicators will facilitate product retrieving for beginners. While the use of complex functions as the advanced search, will stay

the privilege of the most experimented Internet users for some time.

However, the present study suffers from several limits. The First limit lies to the sample size. The use of a single site and a single task type constitutes another limit for our research. It would be interesting to make this same study with various sites, and different tasks.

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