Online Consumer Behavior: A Closer Look

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ABSTRACT

This chapter presents the overall consumer purchase decision cycle and investigates the issues that affect web users from e-shop selection to product delivery and final assessment of the shopping experience. This process has been divided into three successive stages: outside the e-shop, inside the e-shop and after sales. Each stage is analyzed on the basis of customer states and transition conditions, while special focus is set on abandonment factors. The chapter aims to provide a thorough insight to e-shop features that ensure customer satisfaction and those that may result in further enhancement of online shopping. The ultimate objective is to provide guidelines for designing successful e-shops and clarify success and failure factors.

INTRODUCTION

Nowadays the Web comprises a significant advance in technology and the rapidity of its acceptance has been remarkable. It is a powerful tool that has changed the way of conducting business providing companies and customers with limitless options and opportunities. Online catalogs, 24 hours a day, 7 days a week service availability, cut-down in transaction costs, reduction of customer service time, absence of paper and personalization features are only few of the advantages. Companies, in an effort to stay competitive in the new global economy, are increasingly expanding their activities to this new communicational channel, which features as a factor of major profit potential.

As a direct consequence of e-commerce spreading we are witnessing the immergence of a new consumer type, the online consumer or e-customer that uses the Internet for purchasing products and services (Solomon, 2001). Moreover, the online consumer is empowered with new, exciting capabilities: he can search globally for solutions (products or services), compare available options, find details and additional information, read the opinion of people that have already bought the product/service, or proceed with the actual transaction. All these options are available from his office or home and can be used conveniently and fast, while all alternative e-shops are only one (or a few more) clicks away.

As in the case of trivial customers, ensuring e-customer satisfaction is a not a simple task. To a certain degree, e-customers (expect to) behave online similarly to how they behave offline (in traditional real life shops), but in order to fully understand e-customer behavior one should explore issues like the reasons why people use the Internet for their purchases, the benefits and the drawbacks of online buying and the identification of clusters of customers who share common attitudes, behavior, and preferences online (Blackwell et al., 2000). According to (Seybold & Marshak, 1998) consumers prefer the Internet because it offers easier and faster shopping. Convenience, timesaving, moneysaving, greater options, and fun are among the top reasons for shopping online and this kind of knowledge is of great value for dictating efficient e-marketing strategies and motivating e-commerce use with twofold objective: turn non-shoppers into shoppers and increase shopping of current shoppers.

Understanding the process of decision making behind the online shopping behavior is important for developing e-business strategies and can provide guidance for deploying adequate marketing tools for purchasing visitors to buy online (Underhill, 2000). The traditional consumer purchase decision cycle has six stages according to (Windham & Orton, 2000): *stimulate* (realize the need), *consider* (collect ideas for potential solutions), *search* (choose category), *choose* (make selection), *buy* (make purchase transaction) and *buy again*

(repurchase as needed). There also exist variations since in some cases, stages are collapsed or skipped. Adapted to the web context, this cycle is merged to 3 stages: *confidence building*, where a consumer realizes that there is an alternative option for buying products or services, *skirmish*, when he purchases for the first time and *war*, when he keeps on buying products or services (Zaltman, 2003). Lee in 2002 presented a behavioral model for the e-customer. The model is based on three distinct phases: *building trust and confidence*, *online purchase experience*, and *after-purchase needs*. The first phase examines issues connected to the website's brand name, authentication, reliability, credibility, privacy and security. Intuitive navigation, searching facilities, product information, payment modes, usability and convenience are among the consumer requirements that affect the second phase. The last phase relates to on-time delivery, customer support, technical support, availability of product warranty, etc. The combination of the three phases releases a behavioral model that increases consumer trust and leads to more online purchases. Different other cases have also been recorded in the international literature presenting parts of the behavior of the online customer (McEnally, 2002), (Windham & Orton, 2000), (Mowen & Minor, 2000).

This chapter presents the overall consumer purchase decision cycle and investigates the issues that affect web users, from selecting a specific e-shop to the delivery of the product and the overall assessment of the shopping experience. This process has been divided into three successive stages: *outside the e-shop, inside the e-shop* and *after sales*, with each stage is analyzed on the basis of customer states and transition conditions. Special focus is set on identifying the potential abandonment factors thus leading to practical guidelines for all those whose decisions and objectives affect the online shopping experience (e-shop owners, marketing specialists, website designers and developers).

OUTSIDE THE E-SHOP: WILL THEY APPEAR AT YOUR DOORSTEP?

The need of a specific product can be the first motivation for buying it. But enough motivation is also required for choosing online shopping as can be shown in state 1 of the diagram (figure 1) that models the process from the purchase stimulus to entering the e-shop. This relates to the consumer's general attitude and familiarity with computers and the Web, prior personal experiences, experiences of others (friends, colleagues) or brand familiarity (motivation of trust) (Lynch, 2000a).
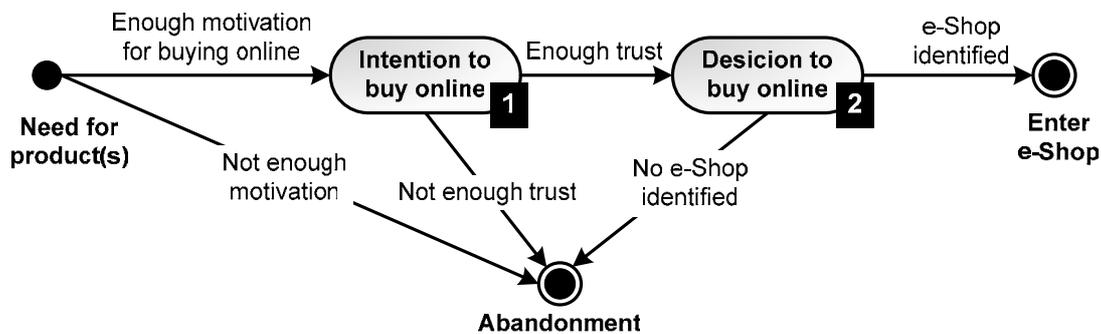

Figure 1: From the Purchase Stimulus to Entering an E-shop.

When the user decides to buy online (state 2), the next step is to identify an e-shop. New websites are launched everyday and thousands of products are available online, so the competition for customer attention is fierce. Consumers are:

- looking for a reliable and well known brand supporting the e-shop (Lynch, 2000b),

- attracted by an aesthetically and consistent website design (Bouquet & Lynch, 2000),

- enjoying navigating through a well-structured and usable website (Sirmakessis, 2003), (Garrett, 2002),

- convinced when receiving accurate content (Markellou et al., 2005a),

- feeling reassured by privacy statements and seals of secured transactions.

Additional factors that influence consumers when choosing an e-shop include pricing, quality of products and services, promotions, offers, after sales support, personalization facilities, etc. There are also customers who chose an e-shop because a search engine returned this link high in its results list. This is also a reason for companies to use multiple communication tactics for making customers aware of their website. Mass advertising, banner ads, links on related product pages, marketing e-mails and search engine promotional actions are only some of the tools that can be used for increasing awareness. But the most crucial issue for a company is to clearly identify its target group among online customers and urge them to its website. The aim is to give them an incentive to visit the website for the first time. For customers with a specific identity (such as an e-mail address), direct contact is the most effective strategy. When customers are not known, a survey for their characteristics could be helpful to ensure that the selected advertising and marketing tactic is the most effective one. Other means for building awareness include affiliate programs with other websites, links from directory searches, e-mail notifications, banner advertisements, etc. (Markellou et al., 2005b).

All the abovementioned apply mainly to new e-customers. For users with prior e-purchase experience, the issue of trust extends to the notion of loyalty. In this case, the website should try to capture as much data as possible in order to use them when users are revisiting the site. This allows companies to personalize content, provide customized experiences and support online communities. Without significant motivation and trust the potential customer fails to identify an e-shop and abandons the process of online shopping, before actually entering it (figure 1).

INSIDE THE E-SHOP: WILL THERE BE SHOPPING?

The state diagram in figure 2 presents the steps e-consumers follow when navigating in an e-shop from the moment they enter it and throughout browsing/searching to identify the item(s) to place in their shopping cart, proceeding to checkout and up to paying and leaving the shop.
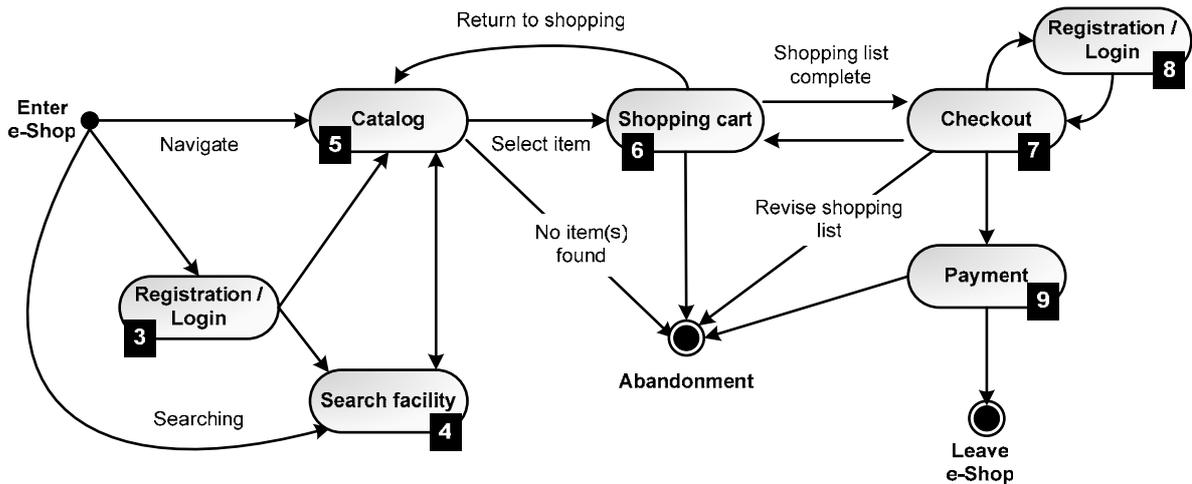

Figure 2: The Shopping Process from Entering to Leaving the E-shop.

State 3 (Registration/Login) -which is also numbered as 8- is an optional state, but the majority of e-commerce sites use it for tracking individual consumers. At this state, first time visitors are asked to provide personal information (such as sex, age, income status, educational background, occupation, marital status, and other demographic information, as well as preferences, requirements, shipping address, billing details, etc.). This amount of information varies and depends on the kind of available products or services and the characteristics of the targeted consumer group. Login is the process a user has to go through in order to be identified by the system in each subsequent visit (after registration). It is an effective and secure way to overcome the typical problems IT experts have in identifying the same user entering a website from different IPs or distinguishing different users from the

same IP. The general guideline is to ask users to fill-in as little information as possible, in a simple, straightforward manner, providing drop-down lists for those questions that have a limited and known range of answers (e.g. country of residence) in order to reduce typing and prevent spelling mistakes. Since website visitors are reluctant to reveal personal information and insecure about its use, e-shops should provide clear statements on their policy for the use of the collected information (disclosure policies) and the security precautions they have taken (authentication seals). As illustrated in figure 2, Registration/Login may be postponed for right before checkout (state 8). This way, consumers are allowed to browse anonymously and identify themselves only when it is absolutely necessary. This approach allows browsing and does not irritate the user with filling in personal information, a process that delays actual shopping.

The next step is to look for interesting items to be placed in the shopping cart either by browsing through products using the catalog (state 3), or by searching (state 4) for something in particular. Web users are familiar with the notion of searching and the typical mechanism of browsing through search results. Thus, regardless of how well structured and efficient the catalog is, an e-shop must also provide a search function and keep it available and visible on all pages so that customers may resort to it whenever in need. The general guideline is that search should operate the way customers expect it to. It should be tolerant to minor misspellings, allow for synonyms and string keywords, return an easily interpretable results page and links to product pages. Furthermore, in the case that a search failed, the response page should clearly indicate that no actual results are returned and where possible provide a way for customers to refine their search until they locate products (provided that the e-shop has them available). The combination of states 4 and 5 is of great importance, not only because selecting products is an integral part of every purchase, but also because it determines the user's impression and a first-level assessment of the e-commerce site. Users spend most of

their time looking for products and use the feedback from this process to decide whether they will go on with the payment or leave their shopping cart at the cash register and exit. Failure to locate the item(s) means one less customer and a hard-to-estimate spreading of disrepute. Either way (by browsing the catalog or using the search utility), the customer sooner or later ends up at a product page (which in some cases may contain a group of products) with details, pictures, features, pricing, and even comparisons, offers, ratings from the customer community, ratings from experts, recommendations and so forth.

On adding an item to the shopping cart (state 6), customers are usually transferred to the page with the current cart contents and price information. On that page they should be allowed to remove one or more items, change item quantities and automatically recalculate costs. In addition, a "return to shopping" link should exist to transfer them back to where they were before adding the last item to the cart (Markellou et al., 2005c). This logic reflects the real-life paradigm exactly; while walking the corridors of a supermarket, we pick up items, put them in the cart and keep on walking until we find the rest of the items in our shopping list. In fact, the real-life situation has a drawback: we cannot easily calculate the total cost of our cart contents and we cannot change quantities and recalculate just by a mouse click. Thus, it is a good idea to construct an effective electronic shopping cart taking advantage of all conveniences offered by IT, stressing this comparative advantage over traditional shopping (Nielsen, 2000), (Markellou et al., 2005b).

After looping through states 4, 5 and 6 as many times as required, customers proceed to checkout (state 7). Checkout is the phase where they are asked to fill in information about delivery (recipient's mail address, date of delivery, packaging details, shipping options, etc.). If the user has not yet logged in (or is not obliged to login) the checkout phase asks for additional data that would otherwise be filled in automatically. Again, typing should be kept to a minimum, as in the previous cases, and all optional fields should be clearly and

consistently marked. This also stands for certain information required during the payment phase (state 9), following right after checkout. Payment also involves filling in forms with the required data for charging customers with the cost of their order. Payment requires simplicity, clarity, certificates, reassurance and a sense of professionalism and safety communicated in as many ways as possible. Security in transactions is not negotiable. There must be detailed information about the measures taken to guarantee security and it must be available on every page of the payment process for whoever wants to view it.

Upon successful completion of the payment phase, the customer should be informed about it, through a response page that provides a code number (which uniquely identifies the submitted order) and the estimated delivery time. This information may alternatively be sent via e-mail. Using the order code number, the customer should be able to trace the status of the order at any time before receiving the product(s). It goes without saying that customer enquiries on the current status of the order should be addressed as soon as possible.

What Can Go Wrong?

A user may abandon a website for many reasons that do not necessarily have to do with the website. In this chapter, we deal only with reasons that are the e-shop's responsibility. For instance, a customer may leave an e-shop because it failed to provide all necessary reassurance and trust for product delivery, because he did not locate the products of interest, or even because he found them but they were overpriced. In other words, we focus on the parameters we can control and suggest ways to avoid what can be avoided.

- *Missing product or product details.* One of the most serious abandonment reasons is failure in locating the product. The fact that customers did not find it, does not necessarily mean that the shop doesn't sell it. It could mean that the shop has the product listed in a wrong way, or that it failed to guide the customers to the specific product page. In such

cases, an effective search utility or the assignment of products in multiple catalog categories might have solved the problem. If the product does not exist in the shop, the best approach is to inform customers as soon as possible. Missing or low quality product details is another major issue because it acts as an indication of poor professionalism and decreases the chances of making a sale.

- *Unreliable and inefficient e-shop operation.* The e-shop -as any web application- should be a 24/7 system, able to function under extreme traffic conditions, providing fast interaction and navigation (with simple and space efficient web pages, representative and well structured catalog categories, available to users with low bandwidth connections).

- *Inconsistency.* The e-shop should be consistent in both the way it looks and functions. All pages should communicate the same business identity and the way to interact and move around it must be consistent (for instance use the same buttons at the same position when they are meant to perform the same function).

- *Outdated technology, bad quality graphics, hard to read text.* It gives a good impression to users to see latest technological practices implemented. The effort, time and money invested in setting up an e-shop are all indicated by the e-shop itself and it is only natural to expect that a customers trusts the professionalism a technologically advanced and carefully designed e-shop.

- *Complicated or ineffective search.* Search should be provided in combination with the catalog in order to provide customers with a reliable alternative tool to locate products (and thus compensate for a poorly designed catalog) or serve a customer who knows from the outset what to buy. A remarkable finding of Nielsen et al. (2000b) is that if users can't find what they are looking for on their first search attempt, the odds that they will succeed in next searches decrease with each subsequent attempt. This, in other words, imposes a quite demanding requirement for e-shop designers and builders: "*they must create*

sophisticated -but simple- search engines capable of delivering the goods on the user's first search query".

- *Missing seals of approval, non-existent or insufficient details on security and disclosure policy, unclear company identification.* Security concerns caused by remote and impersonal ways of conducting business over the Web and the exchange of personal and "sensitive" information have been the large obstacles for e-commerce. The company behind the e-shop should provide clear links to its identity, activities, background, premises address, telephone/fax numbers and any other solid information regarding its "physical" status. Some e-shops even have photos of their personnel available, based on the principle that people like to do business with people. Other than that, the value of seals, certificates, authentication signs and detailed information on privacy should be top priority as well.

Ways to Further Enhance Online Shopping

Taking things to the next level, for an e-shop to increase its chances of ensuring customer satisfaction and long-term profits, it must invest in advanced technological solutions, sense the needs of customers and serve them efficiently. The features discussed in this section, primarily addresses e-shops that sell a wide variety of products, where customers have to deal with an information overload.

Typically, a personalized website recognizes its users, collects information about their preferences (during state 3 or 8) and adapts its services, in order to match user needs. In the e-commerce domain, personalization has spread widely, and provides mechanisms to learn more about customer needs, identify future trends and eventually increase customer loyalty. Personalization may be used in numerous ways for enhancing the online shopping experience (Markellou et al., 2005b). In the simplest scenario, using personalization the e-shop

recognizes and salutes the user upon revisiting or alternatively it automatically pre-fills all data the user has already provided in registration (for instance, name, contact details, even credit card numbers) during checkout and payment. Using more sophisticated approaches (Markellou et al., 2005d), an e-shop can also provide:

Personalized product recommendations and marketing. This refers to the recommendation of a set of products that are related to customer interests and preferences. Many e-shops today implement such techniques (Kobsa et al., 2001), (Mobasher et al., 2000), (Pierrakos et al., 2003) in order to achieve higher cross-selling and up-selling rates and apply personalized marketing by suggesting products a user might be interested in buying, based on the fact that like-minded users have bought them. The algorithms underlying a product recommendation mechanism may vary and can depend on the type of products a shop sells, the profiles of customers it transacts with and the marketing policy decided upon. The crucial factor, when it comes to product recommendations, is that they should be somehow evaluated -either by the shop itself or by asking the customers- so as to know if they have been successful or irritating.

Personalized pricing. E-shops may offer different pricing and payment methods to different users, such as discounts or installments to loyal customers. An attempt of this functionality was provided by Amazon.com, which charged different customers with different prices for the same product. However, the attempt was legally challenged, due to the failure of justifying the reasons behind the differences in prices.

Personalized product configuration. In marketing terms personalization can be a powerful method of transforming a standard product into a specialized solution for an individual. In most of the cases such features require customer input for customizing certain product parameters but the fact remains that the customer can use the shop to specify exact requirements and receive a product configuration along with a price offer (such advanced configuration options can be applied for products like sport shoes or clothing).

Apart from personalization, in the cases of web marts (large e-shops that sell a wide variety of products) consumers need additional tools to answer their product enquiries fast and correctly and speed up their decision making process.

Filtering tools are used for narrowing a large item set down to a subset that satisfies a number of additional criteria. Nielsen et al. (2000a) refer to this category of tools as "winnowing tools". This process is similar to a "search within search results" option offered in some cases along with trivial search. The set of criteria that can be used by consumers for the filtering is predefined by e-shop designers and depend on the product distinguishing features, as well as the set of similar products the e-shop has to offer. Typical such criteria comprise price ranges, brands, colors, sizes, etc.

Comparison tools. Apart from filtering, there are cases of products that are difficult to compare even when the list of similar products along with their attributes is available and thus the purchase decision needs further assistance. Comparison tools typically offer summarizing tables with similar products on one dimension and features on the other and make it easy to compare them on a feature-by-feature basis (e.g. Nokia phones at nokia.com). In such settings it is important that the e-shop allows customers to specify the products to be compared or even the features of the products to base the comparison on. There are (extreme) cases where the product to be purchased is made up of many separate components (such as a user configured PC). In these cases the comparison may have to deal with alternative configurations (combinations of components). Regardless of how useful such decision support tools may prove in the case of large e-shops, they are a diminishing factor for user satisfaction and efficiency when they are available on small shops or when they are not implemented correctly.

Another effective way to improve the impression a customer has about an e-shop stems from the use of the *customer community*, in the form of customer opinions about a product they

have already purchased or product ratings given by experts. Such information is regarded useful for customers as it is considered to be less biased (compared to the features of a product as described by its manufacturer or trader). Ratings, and in general recorded opinion of other buyers or experts are positive signs for the credibility of an e-shop. Returning customers' opinions are considered important for visitors or new coming customers. In many e-shops such ratings appear on the product pages and not on the product category pages. It is much wiser though to provide visual rating indications (stars for instance) on the product listing in category pages since in this way customers can use them as a product comparison factor. Textual comments on the other hand -due to space constraints- may well be restricted to product category pages.

AFTER SALES: WAS IT GOOD ENOUGH TO EXPECT THEM BACK?

In the typical scenario, after successfully leaving the e-shop, customers enter the state of waiting to receive the goods (figure 3). In the case that the order is not delivered by the pre-specified time, the customer usually invokes the order monitoring procedure (state 10). It is also possible to have a customer that enters this state before any delay, just to check if everything proceeds according to the initial schedule. It is the e-shop's task to serve all customers that require feedback on the state of their order regardless of the reason why each one does so.

Upon receiving the order, the customer proceeds with assessing (state 12) whether the products are in good condition and of satisfying quality. If the result of the assessment is negative, so is the impression of the online shopping experience and the specific e-shop. The e-shop has lost a customer and the same goes for those he shared this unpleasant experience with. There are many cases of "merchandise" sold online (for example computer hardware or software) that require after-sales support (state 13). In such cases, the overall customer

impression of the e-shop may be re-evaluated. It may prove that, even if the product itself has been satisfactory, the lack of adequate support results in unwillingness to repeat analogous purchases and thus the e-shop fails to keep the customer coming back to buy more.
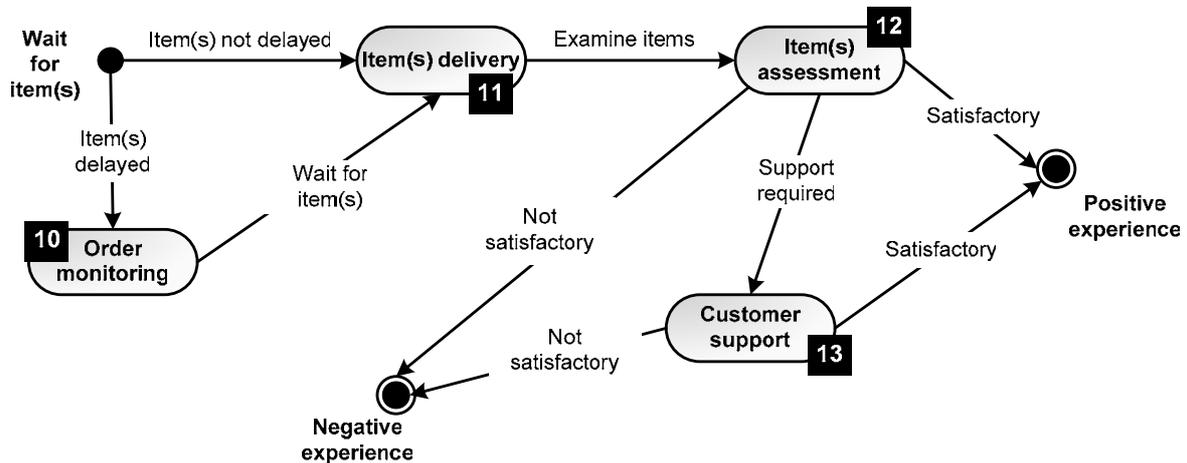

Figure 3: Product Receipt, Customer Support and Overall Assessment.

CONCLUSION

In this chapter we studied the behavior of online customers assuming that it is triggered by a stimulus to purchase a certain item or set of items. Based on this assumption we drew a set of recommendations for all those whose decisions and objectives affect the online shopping experience (e-shop owners, marketing specialists, website designers and developers). The diagrams presented, along with the investigation of the factors that determine the transition between states also complied with this condition.

Everyday experience proves that part of the traffic monitored in online shops is caused by users with slightly (or dramatically) different objectives: there are users just comparing prices among similar products, or looking for product details and specifications, or just browsing (that might result in actual shopping but with extremely low likelihood). The guideline is to treat these visitors with the same policy as if they were customers. More specifically, visitors

of the first two categories, should be able to find the data they are looking for, since this makes them (even unconsciously) record the professionalism of the service and keep it in mind in case they decide to buy online in the future. After all, the Web is inhabited by information seekers (Pirolli & Card, 1999) that by nature appreciate reliable information sources. The last category consists of "window shoppers" and an e-shop should provide enough resources to also cater for this kind of "shopping".

On the road to enhancing the online shopping experience and treat each customer individually, personalization has a central role. The big challenge though remains the lack of trust on the customer side and the lack of customer data on the e-shop side to base the personalization decisions upon. Recording and predicting online consumer behavior is a very hard task. As web surfers are increasingly extending their online experience, they become suspicious of any logging process. On the other hand, they become more demanding on special services focused on their individual needs. Research in the area of mining web usage data (Sirmakessis, 2004) should be accompanied by security preservation methods to increase consumer confidence in the use of the Internet for selling and buying.

In conclusion, e-commerce has opened up a new spectrum of potential by expanding local markets to worldwide ones. E-loyalty is the key to making this huge step forward. Commerce on the Internet may be frictionless and remote, but it need not -and should not- be impersonal. E-loyalty aims at humanizing digital loyalty and developing intimacy. The question is how to gain customer loyalty. A bad first experience with an e-shop can kill the millions spent on the application of an e-loyalty strategy. No e-loyalty program though, regardless of its sound planning or execution excellence can overcome a bad website design, poor product quality or unreliable delivery.

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