# PATTERNS FOR CONSUMER TRUST IN ELECTRONIC COMMERCE

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## ABSTRACT

Since the mid-1990's the psychological and sociological concept of trust has received increasing attention in the field of electronic commerce by many scholars and was recognized as one of the main reasons why a high number of consumers are still reluctant from buying on the Internet. During about the same period of time the idea of design patterns and pattern languages, originally developed in the field of architecture, was adopted by several humancomputer interaction researchers and usability experts to create a common terminology, in order to be able to communicate on design problems and generate solutions for them. However, the notion of applying the pattern approach to the studies of consumer trust in electronic commerce has been practically unexplored by scholars so far. In this paper we overcome this gap, synthesize findings from both areas, argue for the development of a pattern language for trust in electronic commerce and present a first set of sample patterns to illustrate our idea.

# **1. INTRODUCTION**

Despite the rapid growth of the Internet and the high potential of business-to-consumer (B2C) electronic commerce actual online revenues still remain quite modest when compared to the offline world. One of the most frequently cited reasons for consumers not pushing the "purchase click" is the absence of trust (e.g. Hoffman, Novak and Peralta, 1999; Lee and Turban, 2001). In fact "lack of consumer trust, both in the attributes of specific web-based vendors and in the overall web environment, has been, and remains, a hindrance to electronic commerce" (McKnight, Choudhury and Kacmar, 2002, p. 298).

In the last years, a number of empirical studies have investigated the role of trust in the e-commerce environment with all kinds of different research foci, analyzing interpersonal trust, i.e. towards the online vendor, system trust, i.e. towards e-commerce in general, and dispositional trust, i.e. personal characteristics affecting the decision to trust (for an overview see Grabner-Kräuter and Kaluscha, 2003a, 2003b; Shankar, Urban and Sultan, 2002). Among the factors found to significantly influence interpersonal trust, especially in the initial phase of

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the e-commerce relationship, was the design, functionality and content of the merchants website (e.g. in Koufaris and Hampton-Sosa, 2002, or McKnight et al., 2002; see also Kim and Moon, 1998; Lohse and Spiller, 1999; Roy, Dewit and Aubert, 2001; Park, 2002; Yoon, 2002). Industry leaders have also recognized the importance of reducing consumers' perceived risk, by signaling trustworthiness and reliability and provide all different kinds of instruments on their web-pages, e.g. online customer reviews, policies regarding their procedures or seals and certificates from trusted third parties. Nevertheless many e-commerce sites are still troubled with bad usability, blurry privacy and security procedures, unclear warranties, confusing representation of goods, etc. (e.g. Nielsen, 1999, 2001, 2002) resulting in suspicious users wondering if these sites are fraudulent or just incapable.

The original concept of patterns and pattern languages and has been adopted in various disciplines, such as software engineering, human-computer interaction, and usability research. However, the notion of applying the pattern approach to the subject of consumer trust in electronic commerce has been practically unexplored by scholars so far. In this paper we overcome this gap and discuss the idea of a pattern language for trustworthy Internet storefronts to facilitate B2C electronic commerce. Based on managerial implications derived from a recent review of eleven empirical studies on online trust we present a set of sample patterns, which provide a basis for the development of a new pattern language.

# 2. CONSUMER TRUST IN ELECTRONIC COMMERCE

Trust in general, is an important factor in many social interactions involving uncertainty and dependency. Transactions over the Internet are not only characterized by high levels of uncertainty, but also by anonymity, lack of control and potential opportunism, making risk and trust crucial elements of electronic commerce (Grabner-Kräuter, 2002). Online transactions normally do not involve simultaneous exchange of goods and money - temporal and spatial separation between the exchange partners is common to most commercial transactions on the Internet. Furthermore consumers are required to share sensitive personal information (such as mailing address or telephone numbers) and financial information (such as credit card numbers), even though the online vendor may be located in another country or may have limited history of prior online transactions (Bhattacherjee, 2002). Because of the fierce competition in electronic markets the online consumer is also overwhelmed with a myriad of similar offerings to choose from and stunned by conflicting marketing messages. The online consumer cannot personally inspect the products or services and does not know what the merchant will do with the personal information that she or he provides or that is automatically collected during the shopping process. There seems little assurance that the consumer will get what she or he sees on the computer screen, at a certain time, quality and quantity ordered. Having only limited cognitive resources available, consumers seek to reduce the uncertainty and complexity of transactions in electronic markets by applying mental shortcuts. One effective mental shortcut is trust, which can serve as mechanism to reduce the complexity of human conduct in situations where people have to cope with uncertainty (Luhmann, 1989). Due to the lack of a generally accepted definition of trust, neither in the offline nor in the online environment (cf. Rousseau, Sitkin, Butt and Camerer, 1998; McKnight and Chervany, 2002) we will use this functional perspective of trust as a basic framework for this paper.

In a recent review of prior empirical studies on consumer trust in e-commerce Grabner-Kräuter and Kaluscha (2003a) presented a number of managerial implications derived from eleven studies, classifying these recommendations into three categories of instruments that can help to make transactions and cooperative relationships on the Internet more efficient: information policies, reputation policies and warranty policies. Information policies primarily aim at reducing information asymmetries between sellers and buyers by applying various communicative measures. In the case of e-commerce such measures primarily focus on the information available on the web-site or provided during the transaction process. Reputation is the result of trustworthy behavior and plays an important role in determining the willingness of others to enter into an exchange with a given actor. Reputation policies heavily depend on the nature and the situation of the web-company. A "click-and-mortar" company, using the Internet as an additional distribution channel, can take advantage of a good offline reputation, existing references or of image transfers from its "real-world" brands. "Pureplays" on the other hand have to compensate a possible lack of good reputation by investing in different trust developing measures and signaling activities, e.g. advertising, publishing successful projects or cross-linking with credible reference sites. Warranty policies on the other hand relate to promises by the vendor to limit damages or compensate the consumer for losses that are caused by negative events that can not be completely ruled out by the transaction parties. Such policies include for example return and refund policies, credit card loss assurance policies or trusted third party certificates (for a detailed overview of trust building measures see table 1). In the following we will use the findings from Grabner-Kräuter and Kaluscha, as a basis for the development of a first set of basic patterns directed at building consumers' trust in the online vendor.

# **3. DEVELOPING A PATTERN LANGUAGE FOR ONLINE CONSUMER TRUST**

To date the idea of patterns and pattern languages by Christopher Alexander and his colleagues (cf. Alexander, Ishikawa, Silverstein, Jacobson, Fiksdahl-King and Angel, 1977; Alexander, 1979) has been adopted by members of different research disciplines. Although probably being most popular in software engineering, within the object-oriented design community, especially after the appearance of the work by Gamma, Helm, Johnson and Vlissides (1995), we primarily draw from Alexander's original works and pattern research in the field of human-computer interaction (HCI). One reason for that is that HCI patterns seem more suitable as a starting point for our purpose, because they address something which users directly utilize and interact with while software design patterns address something that the end users will not directly interact with (Borchers, 2000). The second reason, strongly linked with the first one, is that the patterns that have been developed within object-oriented software engineering are not readable for people outside this community. However, one of Alexander's main ideas was to provide a common language not only expert professionals would understand but also non-professional end users (Tidwell, 1999; Borchers, 2001), an essential benefit we also would like to add to our pattern language.

Searching the Internet and existing literature various forms of HCI pattern collections can be found, e.g. by Tidwell (http://time-tripper.com/uipatterns), Fincher (http://www.cs.ukc.ac.uk/people/staff/saf/patterns/gallery.html), the Usability Group of the University of Brighton (http://www.cmis.brighton.ac.uk/research/patterns/home.html), by van Welie (http://www.welie.com/patterns), by Rossi and his colleagues (e.g. Rossi et al., 2000;

Rossi et al., 2001) or by Graham (e.g. Graham, 2002). Although they all are more or less similar to the format of Alexander there has not been any agreement on a single pattern format in HCI yet. Additionally merely a relatively small number of patterns has been published to date. Thus, no genuine HCI pattern language has been generated so far (van Welie and Trœtteberg, 2000).

After carrying out a literature review on existing trust building patterns for e-commerce only three single design patterns by Perzel and Kane (1999) were found focusing on the problem of how web-developers can bring end users to provide personal information they are reluctant to share. Of these three however, only one pattern, named "Policy Statement", explicitly consumers' addresses trust in this context (cf. http://www.it.bton.ac.uk/staff/rng/UPLworkshop99/Patterns/PerzilKane.html). Besides Perzel and Kane also van Welie, a Dutch usability expert, developed several usability patterns for the context of e-commerce (cf. http://www.welie.com/patterns, see e.g., the patterns "Shopping", "Identify", "Register" and "Commerce Site"). However, van Welie rather employs a "basic" usability approach and his patterns do not really include the element of consumers' trust.<sup>1</sup>

Drawing from existing usability patterns and the trust-building recommendations presented in Grabner-Kräuter and Kaluscha (2003a), introduced in table 1, we have selected three sample topics that we will convert into trust patterns to illustrate our idea of a pattern language for online consumer trust. The first sample pattern presented below, "Contact us", belongs to the category of information policies. "Contact us" is based on original recommendations by Gefen and Straub (2000), de Ruyter et al. (2001) and Lee and Turban (2001) (see table 1). This pattern covers the problem that users want to have the opportunity to contact the online store over all different kinds of channels, e.g. not only by e-mail but also by toll-free hotlines, via fax, through live chats, etc. Hence, providing the customer with a broad variety of communication channels will help the customer to access all information needed and to form an opinion about the trustworthiness of the online store. This may also signal that the company strives for a good customer relationship management and thus help reducing consumers' perceived risks (de Ruyter et al., 2001; Grabner-Kräuter and Kaluscha, 2003a). The second pattern, "Consumer testimonials", can be assigned to the category reputation policies. It basically treats the need of the consumer to get independent information on the past behavior of the online vendor or on the credibility of information provided on the website. One possible solution for this problem are consumer testimonials (based on Jarvenpaa et al. 1999, 2000; Kim and Prabhakar, 2002; see table 1). The last pattern is a pattern for warranty policy, focusing on the problem that the potential client needs to know the possible options concerning reimbursement in case of defectiveness of the product or in case of discontent (see table 1 or Jarvenpaa et al. 1999, 2000; Lee and Turban, 2001; de Ruyter et al., 2001). We called this pattern "Return policy".

Regarding the pattern structure, all three patterns presented below are largely based on the format used by van Welie, which is easily understandable and seems appropriate for the ecommerce context. Each pattern starts with a short title, an example in form of a screenshot, followed by a description of the general user problem, applications for this pattern, the solution to the problem and why this pattern is needed. After that more visual examples are presented, completing the specific pattern with a short list of other known uses by online stores and possible other patterns that relate to the pattern presented.

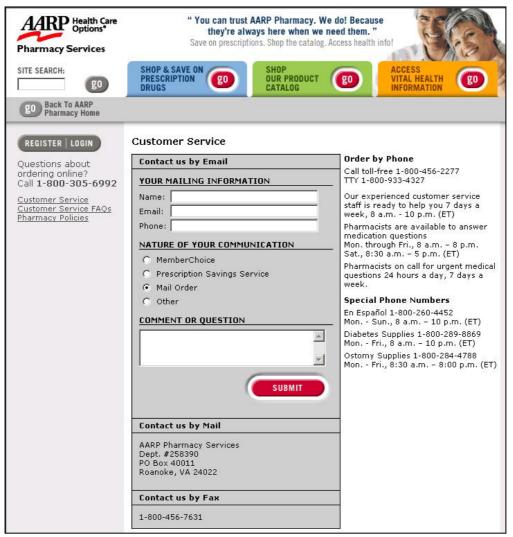
<sup>&</sup>lt;sup>1</sup> This information is not completely correct any more. Since our paper was originally written some time has passed and currently patterns for consumer trust in e-commerce can also be found in van Duyne et al. (2003) and on the website of van Welie who, in cooperation with us, included our patterns "Contact us" and "Consumer Testimonials" in his pattern collection (see http://www.welie.com/patterns).

Table 1. Trust Building Measures(slightly adapted from Grabner-Kräuter and Kaluscha, 2003a)

Study	Context	Proposed trust building measures and managerial implications			
		Information policy	Reputation policy	Warranty policy	
Jarvenpaa et al. (1999, 2000)	exploring initial trust in an Internet store and cross- cultural validation, using online bookstores and travel-sites	impress potential customers regarding the (perceived) size of the online store, e.g. by stating the number of physical outlets, the number of staff or, if e.g. leading in the sector, use claims like "the world's largest online bookstore"	brick and mortar companies can transfer their offline reputation onto the Internet; pure plays can state their history on the web-site, collect and publish customer testimonials regarding the quality, value or efficiency of the service on the homepage	the company should quote its policies for customer satisfaction, returns, refunds etc. on the web-site	
Gefen (2000)	exploring trust in an e-commerce vendor, using an online bookstore	include an "About us" section on a noticeable place of the homepage presenting the company and its e-commerce procedures	familiarity affects trust, therefore the company should increase the web-site awareness with advertising		
Gefen and Straub (2000)	exploring trust in an e- service provider, using an online travel agency	increase the "social presence" of the web- site e.g. by maintaining virtual communities, providing toll free hotlines, responsive services through e-mail or web-push technologies, synchronous message boards where questions can be posted online to a sales-representative and show that the company is trying to provide a good customer relationship management			
de Ruyter et al. (2001)	exploring the antecedents of trust, relative advantage and perceived risk in the adoption of e-services	add "click-to-talk" buttons, interactive chat- rooms for real time query, automated e-mail responses, visibility cues/multimedia aids; clearly state the company's mission and identity; emphasize privacy, security and confidentiality	create an "e-mage" using various communication channels; cross- link the company's web-site with credible reference sites; publish your best practice cases	implement a strong warranty policy	
Lee and Turban (2001)	exploring the antecedents of consumer trust in Internet shopping	the design of the Internet storefront is an important aspect; provide the ability to schedule human customer service sessions, e.g. by telephone or via the Internet	use advertising and marketing campaigns	provide credit card loss- assurance policies, product warranty policies, a policy on returned merchandise, the availability of escrow services	
Pavlou and Chellappa (2001)	exploring the antecedents of trust in electronic commerce transactions			identify which mechanisms are effective in building trust through privacy and security and employ not only existing, popular mechanisms but also novel ones; independent third party mechanisms need to be promoted because they are only effective and valuable if consumers are informed about them	
Bhattacherjee (2002)	developing a new scale for measuring trust and testing it with an e-commerce company, using an online bookstore	online companies which are depending on continuous user transactions (e.g. online banking or brokerage) should identify users with low trust levels and ensure their retention by applying special marketing communication and education programs to rebuild trust			
Kim and Prabhakar (2002)	exploring initial trust in the adoption of online banking		publish testimonials from current users - these statements are considered to be independent and credible	provide guarantees and other "safety nets" for the customers	
Koufaris and Hampton- Sosa (2002)	exploring the antecedents of initial trust in an online company, using several e-vendors	a positive experience with the web-site is essential for building trust (especially perceived usefulness and ease of use); the homepage should be designed to be enjoyable, there ought to be positive challenges for the users and the feeling of being in control during the usage; it should provide value added information, e.g. product reviews and recommendations			
Pavlou (2003)	exploring the effect of trust in e-commerce on several factors including consumers' intention to transact		the reputation of the web-retailer and consumers' satisfaction with past transactions are important for trust-building which should be kept in mind by the online company		

# 3.1. Information Policy Patterns

# Pattern: "Contact us"



Example from: <u>www.aarppharmacy.com</u>

## **Problem:**

Generally speaking, in any type of store customers have questions. They may be searching for a specific item, or wish to discuss the relative merits of two similar products, they may have questions regarding the terms of payment and delivery, or may just have some comments to share with the seller. In an offline brick and mortar store, customers can usually easily find a helpful clerk right at their elbow, with whom they can discuss their questions and problems.

Though, when it comes to online shopping, the traditional, tangible store with its employees is seemingly replaced just by the web-site, a graphical interface that potentially may suggest the lack of human beings, which tends to make (potential) buyers wary of e-commerce companies, and less willing to buy. Therefore, Internet users look especially for cues signaling them that they can get hold of the "real" people running the online store.

## Use when:

This pattern applies to virtually every e-commerce web-site.

### Solution:

Include an easy to access "Contact us", or similarly titled, section on a noticeable place of the web-page where the user can find all necessary contact information she/he might need before, during or after a purchase to get in touch with a real person that may be able to answer the customer's questions and solve their problems.

## Consider the following implementation issues:

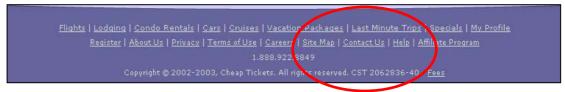
- 1.) The information provided in a "Contact us" section should contain at least the postal address of the company and its possible subsidiaries, e-mail address(es) and phone and fax number(s). If announcing phone and fax numbers, the company should declare if they are toll-free or if any fees are arising for the customer, as well as operating hours and international dialing codes for oversees customers. Web retailers may additionally offer functionalities such as a "store locator", which allows users to track for example the closest offline outlet to her/his residence, or additional communicative features like voice over IP, online chats with sales representatives or request forms where customers can leave their phone number to be called back at a specified point in time, etc. In some EU countries, e.g. in Austria, there are also laws governing the minimum amount of contact information to be shown on the web-site which have to be complied with observed by the online company.
- 2.) In general, when implementing such a "Contact us" section it should be imperative to focus on a transparent, easy-to-access solution. At present several different ways of incorporating a "Contact us" section at a web-site are used by online companies across the WWW. Yet, two forms are more common than others. These two approaches, exemplary presented below, are relatively concise and provide the user with the opportunity to efficiently access any required contact information:

The first alternative, which has been adopted by a number of Internet stores, is to position a direct link to the company's contact information at the very top of the website (see the two examples below).





The second approach, also employed by various online stores, is to provide a link to the "Contact us" section at the bottom of the web-site (see the two examples below).



www.cheaptickets.com

Search
Site Map   Search Tips
Visit the Apple Store <u>online</u> or at <u>retail</u> locations. 1-800-MY-APPLE
Find <mark>Job Opportunities</mark> at Apple.
Visit other Apple sites around the world:
Choose
Contact Us   <u>Privacy Policy</u> Copyright © 2003 Apple Computer, Inc. <u>All rights reserved.</u>

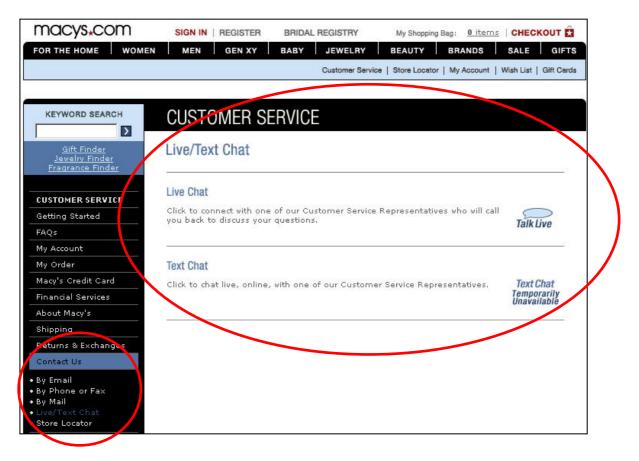
Both of these two approaches are often accompanied by links to other important subpages that typically contain general, relevant information for first-time customers or clients that are not very familiar with the company, its web-site and e-commerce procedures (e.g. an "About us" section, presenting the overall company, its history and mission etc., a "Site Map", providing an overview of the structure and content of the homepage, "Frequently Asked Questions - FAQ" or a Policy Section, disclaiming warranties, data protection, etc.) or site-search functionalities.

Oftentimes the "Contact us" section is part of a more comprehensive "Help" or "Customer Service" area, too. Nevertheless, as stated above, there should be a link for direct access of any contact information at the company's main page.

3.) It is noteworthy that just providing easy accessible and comprehensive contact information on the website is clearly not enough to gain consumer trust. Two very important aspects are also the vendor's response time in case of customer inquiries and the quality of the vendor's feedback. Yet, these latter two issues strongly depend on the financial backup and opportunities of the online vendor.

## Why:

Users do not want to be bothered with troublesome search for contact information. They immediately want to know how they can get in touch with the people behind the web-site and under which terms and conditions.



More examples: "Contact us" section at <u>www.macys.com</u>

#### Other known uses:

Forexampleathttp://www.dell.com/us/en/gen/contact.htm,http://www.ftd.com/350/custserv/contact.epl,http://shopping.discovery.com,www.ambrosiawine.com/ambrosia2/customerservice/gateway.asp,http://www.intel.com,http://www.netgrocer.comhttp://www.intel.com,

## **Related patterns:**

"Corporate site" (http://www.welie.com/patterns/corporate.html),

"Sitemap" (http://www.welie.com/patterns/sitemap.html),

"Frequently Asked Questions" (http://www.welie.com/patterns/faq.html) and

"Search Area" (http://www.welie.com/patterns/searcharea.html), all by van Welie;

"Just looking" (<u>http://www.cmis.brighton.ac.uk/research/patterns/home.html</u>) by the Usability Group of the University of Brighton

# 3.2. Reputation Policy Patterns

# Pattern: "Consumer Testimonials"



Example from: <u>www.amazon.com</u>

#### **Problem:**

The user visits the web-site of the online vendor in search for a certain product she/he would like to purchase. However, when buying online the customer cannot personally inspect the quality of the product before ordering and, beyond that, she/he may doubt the adequacy of the product description given by the Internet vendor or even the integrity and reliability of the vendor at all. Therefore the user wants to get more independent information from other customers concerning the quality of the desired product and/or the trustworthiness of the vendor.

#### Use when:

Use when products or services are sold online at your store and when it is difficult to provide objective information on these, like pictures, multimedia aids or product samples. Use also when you want to demonstrate your benevolence and that you do not have anything to hide from your customers.

#### Solution:

Provide the users with the opportunity to comment on previous transactions carried out with the specific company, their satisfaction with the quality and delivery of the products, etc. by posting an online review at the company's web-site which may be read by other consumers.

The object of such reviews may be either the online seller (e.g. at eBay) or a specific product or service sold on the web-site (e.g. at Amazon.com).

## Consider the following implementation issues:

- 1.) To facilitate the quality of the reviews, to prevent their misuse and to avoid this feature being degraded to a kind of "guest book", where everyone passing by leaves some improper messages, the act of writing a review should be available for registered users only.
- 2.) As most consumer testimonials on the web are voluntary, and typically tend to attract the most opinionated users, it should be kept in mind that as a result the testimonials are inherently unreliable. In order to counter this and to increase the objectivity of such testimonials online companies may try to take several measures:

One possible approach would be to allow the people reading the reviews to indicate whether a specific review was useful, e.g. in the light of also having purchased the product, and by rating the reviewers based on the perceived usefulness of their reviews (e.g. like Amazon.com's top reviewer ranking).

Another approach may be to try to get a more representative sample of customers to write online reviews, e.g. by contacting customers after a purchase on a random basis, providing them with a link to the company's web-site where they get the opportunity to review the specific product. Nevertheless, it should be kept in mind by the online store and the customers that reliable and representative information can only be acquired through a survey, following accepted survey practices.

- 3.) An additional aspect that should be imperative for online stores implementing an online review feature is to refrain from manipulating or filtering (justified) negative reviews, although on the surface it may be in the company's best interest to have only positive reviews. If such a manipulation would be uncovered and made public, customers would lose their trust in the testimonials and the company. Rather the online store should try to use any negative reviews as feedback to enhance its services and business procedures. The online vendor may also consider responding to negative customer feedback on the website, signaling that it has noted the statement, that it listens to customers and that the company is willing to improve.
- 4.) When implementing an online review tool at the web-site the company should pay attention to the consumer's necessity of being able to read this reviews without any efforts. I.e., product reviews should be available immediately while the user is searching for a product of her/his need (see the example below) while possible ratings of the company could be part of an independent section of the web-page providing an overall presentation of the online store.



www.dooyoo.co.uk

5.) Regarding the evaluation of the level of satisfaction it is common to use some graphical metaphor, such as stars or bars, sometimes combined with numerical ratings. The benefit of this approach is that other users can get a first impression of the rating at a glance even before reading the whole review as well as the opportunity of enabling some kind of basic comparison, aside from the written individual reviews (see the two examples below). As a rule of thumb rates of no higher than ten and no less than four should be used, since otherwise these graphical metaphors may become difficult to interpret and may offer less value to readers.

The Talisman -	Stephen King	
★★★★★ 4,00/5,0 (recommended by 80%		en la
Would you read it again?	4,0	
Story Characters	4,0	
Readability	4,0	
How does it compare to similar works?	4,0	
		Write an opinio

www.ciao.co.uk



www.dooyoo.co.uk

## Why:

Although many users reading customer reviews may recognize them as being subjective and unreliable, they usually tend to trust information from independent third parties – in this case other users which are impartial and unsuspected of telling not the truth - rather than the information provided by the (unfamiliar) online vendor, who is potentially suspicious of presenting information serving just his own interest. In addition, a review feature gives the customers the impression that the online store has nothing to hide from them and even wants them to communicate on their experiences with the store and its products.



Profile of 50,000 to 99,999.

Profile of 100,000 or higher.

• A "Red Shooting Star" ( *>*) represents a Feedback

## More examples: Seller Reviews at www.ebay.com

# Other known uses:

For example at www.bn.com, www.dealtime.com

#### **Related patterns:**

"Registration" (http://www.welie.com/patterns/registration.html),

"Identify" (http://www.welie.com/patterns/identify.html) and

"Product Comparison" (http://www.welie.com/patterns/comparison.html) by van Welie.

# **3.3. Warranty Policy Patterns**

# Pattern: "RETURN POLICY"

LEGO Shop at Home Return Poli	cy
Your satisfaction is our primary	objective
We believe our toys and other produ of our toys.	cts must live up to your highest expectations. And our service must live up to the quality
follow the instructions outlined on the	u. If for some reason, you need to return part or all of your order, it's easy! Simply a reverse side of the packing slip that's inside your order. All returns are acknowledged credited to the original payment method.
• Any returns within 60 days	${f s}$ of your received date - we'll give you a full refund no questions asked!
<ul> <li>Unopened Sets - we will acc refund.</li> </ul>	ept returned unopened sets at any time and give you an exchange, replacement, or
<ul> <li>Returned Opened - we will a credit of your purchased price</li> </ul>	accept returned opened sets within one year after purchase and you will receive a full a toward your next order.
<ul> <li>Returns for Auctions Only during shipping or the wrong p</li> </ul>	- LEGO® Shop At Home will not accept returns for auction merchandise unless damaged product was shipped.
If for any reason you are not entirely	y satisfied with an order, please contact the LEGO Shop at Home Customer Service team
<ul> <li>In North America - 800-835-4 shop.at.home.americas@lego.</li> </ul>	386, Monday-Friday 8am to 10pm ET; Saturday & Sunday 10am to 6pm, or e-mail us at: . <mark>.com</mark>
<ul> <li>In Australia and New Zealand</li> </ul>	, shop@lego.com
• In Austria - toll-free 0800 293	896 - Monday-Friday 8am to 8pm G.M.T.
• In Italy - toll-free 800 781 62:	1 - Monday-Friday 8am to 8pm G.M.T.
<ul> <li>Throughout the rest of Europe shop.at.home.europe@lego.cc</li> </ul>	e toll free - 00 800-5346-2222 - Monday-Friday 8am to 8pm G.M.T., or e-mail us at:
Please note we can only accept i Home.	returns for merchandise customers purchased directly from LEGO Shop at

Example from: <u>http://shop.lego.com</u>

#### **Problem:**

The user thinks about purchasing a product or service at the online store, but wants security and control similar to buying in the corner shop, although she/he cannot personally inspect the product or service before ordering online. The customer probably will be willing to pay in advance only if she/he can be sure to get the money back in case of non-delivery, defectiveness of the product or in case of discontent. As the vast majority of pure-play webretailers have only a short business history and thus not built up a high level of reputation yet, the question of easy returns is crucial for (potential) customers.

#### Use when:

Use when products or services are sold at the online store and afterwards delivered to the customers.

## Solution:

Provide a detailed "Return Policy" on a clearly visible place of the company's web-site including all necessary after-sales information, terms and conditions consumers may need to know before purchasing a good or in case of actual return.

### Consider the following implementation issues:

1.) The information provided in the "Return Policy" should contain detailed contact information, all relevant due dates and time limits for returns, essential supporting documents, any possible restrictions and exceptions, etc. allowing the user to get a clear impression of what she/he can expect from the company.

Regarding the nature of the online store one aspect may differ significantly if the company is a pure play, online only store or if it is a brick and click company having a longer history and a number of offline outlets. In the first case the online store should emphasize a very liberal return policy, e.g. a "No Questions Asked - Return Policy" while in the latter case the company may possibly stress the opportunity of returning products not only by sending them back but also by returning it at one of their offline outlets.

2.) There are several different ways of implementing a "Return Policy" at the website. One alternative is to included it in a comprehensive "Help" or "Customer Service" section. Another way is to integrate it in an independent section dedicated to all of the company's warranty policies. A different approach, also adopted by a number of online stores, is to feature the "Return Policy" right at the (bottom of) main page of the web-site (see the example below).



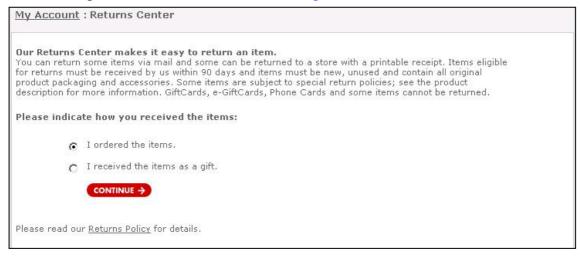
- 3.) A link to the "Return Policy" should also be placed very near the "point of sale", i.e. the checkout and payment area of the website. This approach may avoid users backing out at the last moment because being worried about what might happen if the product is "wrong".
- 4.) When publishing a "Return Policy" on its website the online vendor should focus on keeping it in "plain English" as too much legal expressions in the policy may confuse the customer and potentially leave a negative impression in the mind of the reader (e.g. the user might think the vendor wants to intentionally confuse readers). Thus, the return policy should be kept simple and might be best

structured according to concerns consumers face most often (e.g. What can I return? What is the time limit for returns? etc.)

#### Why:

Users already know from offline shopping experiences that sometimes purchased products for example do not fulfill the necessary requirements, that they can be defective or simply not the model the user was looking for. Therefore, clear and liberal return policies are needed to assure the consumer of the safety of shopping at the specific online store.

#### More examples: "Return an item" at www.target.com



#### Other known uses:

For example at www.ibm.com, www.amazon.com

#### **Related patterns:**

This pattern can be accompanied by "Privacy Statement" by Perzel and Kane, 1999, (http://www.it.bton.ac.uk/staff/rng/UPLworkshop99/Patterns/PerzilKane.html);

See also the "Contact us" pattern presented above in section 3.1.

## 4. Discussion

Offline experiences and empirical findings indicate that consumers' trust is a crucial element in the process of the adoption of e-commerce. Furthermore several recent studies found the site-content and the design of the vendor's web-site among the main predictors for users' initial trust in the vendor. Based on these findings we presented design patterns as a way to overcome obstacles regarding the lack of (perceived) trustworthiness of Internet storefronts. Drawing from a number of managerial implications derived from prior empirical studies on online trust and artifacts taken from existing web-sites, we created a first set of sample patterns to illustrate our idea. These patterns represent a balanced mix between usability issues and business policy aspects.

We believe that patterns and subsequently a pattern language can contribute a lot to the field of online trust and may offer several advantages. Firstly, it can serve as a common, interdisciplinary terminology for scholars, practitioners and consumers to communicate on design-related trust problems they encounter and to provide solutions to them. Such a pattern collection could be for example maintained and advanced by an independent research institution and could act as "reference book" and as interface between users and designers.

Another possible field of application may be small and medium sized enterprises (SMEs). To fully exploit the potential of B2C e-commerce for SMEs it will also be necessary to bring them into and keep them in the electronic marketplace. However, SMEs still significantly lag behind when it comes to e-commerce (e.g. only 17% of European SMEs use e-commerce as channel of distribution, compared to 42% of large-scale enterprises, Deiss, 2002). As SMEs usually do not have the resources to employ researchers or usability experts such a lack of knowledge could lead to low online revenues and the decision to abandon the electronic marketplace as (additional) channel of distribution, even though a particular SME may be very reliable and offer goods of high quality. In this case trust patterns may provide SMEs with solutions for a trustworthy design of their Internet storefront.

Moreover design patterns may be characterized as hypotheses (cf. Alexander et al., 1977, p. xv) which can be used as origins for quantitative user studies on the antecedents and consequences of consumers' online trust.

Although offering a number of advantages, single design patterns and even an extensive pattern language can of course not overcome all hindrances in e-commerce. Potential misuse of data, fraud or simply unreliable fulfillment of orders remain barriers to e-commerce that users are very aware of. Simply applying some patterns will not be enough to gain consumers' trust. Especially for a newly established online store it will be necessary to combine such patterns with a comprehensive set of other measures, e.g. to apply for certificates and seals from trusted-third parties that will guarantee for the credibility of the information provided on the vendor's web-site - which could also be considered as a trust pattern if such a seal is shown on the web-site - or to engage in advertising and marketing campaigns. Nevertheless, initial trust is only a starting point for mutually beneficial exchange relationships on the Internet. When it comes to building and stabilizing consumers' trust the vendor will be judged by many other factors, especially the actual fulfillment of orders.

Finally an important aspect that has to be addressed is the need for empirical evidence of the validity of the patterns. To overcome this problem Borchers suggests that each pattern created

should include brief summaries of results from empirical user studies, referencing the original publications (Borchers, 2000). We tried to cope with this requirement by basing our patterns on recommendations formulated by researchers after carrying out empirical studies on consumers' online trust.

## **5.** Conclusion

After all, trust is a complex and dynamic phenomenon that can not simply be "produced" by applying some patterns. Trusting beliefs and intentions and trust-related behaviors result from a delicate, situational interplay of different factors. The effect of measures to develop and maintain trust in e-commerce is also influenced by several other factors - person-specific (e.g. personality traits that influence trusting beliefs, intentions and behaviors) and contextual (such as technology and legal norms related to e-commerce) - that can not be controlled by the online retailer. Yet, we believe that the idea of a pattern language for trustworthy Internet storefronts can be one promising element in building consumers' trust towards Internet merchants and in fostering B2C electronic commerce.

## Acknowledgements

We like to thank our shepherd Neil Harrison for guiding us gently and providing many useful suggestions. Thanks go also to the participants of the Writers Workshop at EuroPLoP 2003 and to Gary Bunker for helpful comments which we incorporated in the final version of this paper.

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