

Avoiding Distrust Online

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Abstract

This paper discusses trust as it pertains to first time ecommerce transactions on non-branded sites. It suggests that research should focus on *avoiding distrust engendering factors* instead of trust building factors because trust can only be built over time and multiple interactions.

1 Introduction

Trust is a very active and prolific field of study for HCI, psychology, and sociology. In general, trust is defined as the willingness to accept vulnerability and assume a certain amount of risk in the belief that the other party will fulfill their part of an assumed or implied contract.

This paper focuses on ecommerce businesses with the following assumptions:

- The businesses aren't well known brand names, so decisions to buy can't be made based on reputation
- They are found through search engines or links from other sites
- They could be based anywhere in the world
- The customer wants to buy something that is available through the website
- The customer has no previous experience with this vendor

The question seems to be: How does a vendor keep a customer from aborting the transaction because of lack of trust?

2 Readings

Readings from HCI, behavioral, organizational, and computer science fields were chosen for this paper. A short review will show the author's path to determine that trust and distrust are separate but related subjects. And that distrust may be more important to avoid than building trust on a first interaction.

2.1 Florian Egger, MoTEC (Egger, 2003)

Egger's thesis presents a thorough examination of work in the online ecommerce field, and he analyses it to "deduce potential factors for trust formation" as it pertains to interpersonal, business, and technology relationships. He proposes a theory and methods of formal testing specifically related to initial trust or perceived trustworthiness, based on superficial cues, as opposed to trust, which is acquired over time (experienced trustworthiness).

For instance, an online attitudinal survey (Fogg et al., 2000) indicates that certain features such as real-world presence (evidence that a business actually exists at a specific location), photographs of staff, professional website appearance, ease of use, and up-to-date information contribute to credibility. Features found to reduce credibility included typographical errors and technical problems that reduced availability and reliability. Egger finds this concept of credibility supports his view of initial trust/trustworthiness. He believes that a report by Cheskin Research and Architype/Sapient supports his view of trustworthiness by acknowledging as fact that "trustworthiness can be communicated at the very outset of the interaction." However highlights from the report say "Trustworthiness Isn't the Most Important Attribute a Site Can Possess, but It's Still Fundamental. ... Strong fulfillment and navigation are key, independent of trust issues. In addition, overall value, selection and lower cost all can be more important." (Cheskin Research, 1999)

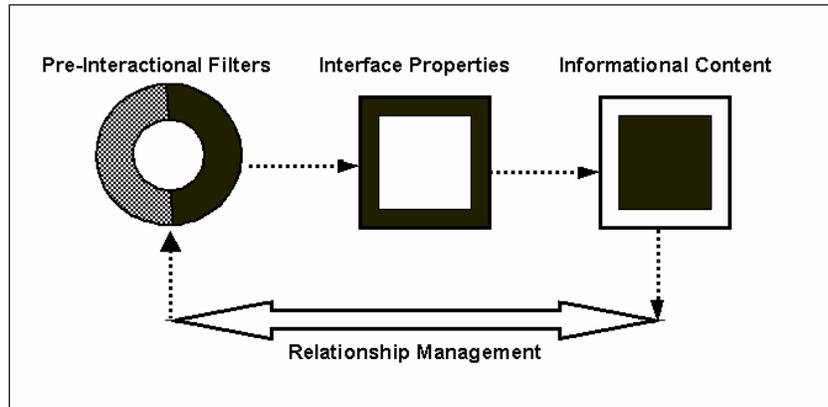
Egger says he has focused on factors of trust for initial contact. He recognizes that trust can only be built through iterative transactions, so he calls his work "trustworthiness."

Egger believes it imperative to show that benefits of ecommerce significantly outweigh potential risks. He considers the efficacy of privacy seals such as TRUSTe, but points out that US based seals were not significant for users in other countries. He covers mistrust engendered through new business models

created on the internet, and also considers affective behaviors, particularly related to unfamiliarity, and cognitive behavior including risk assessment.

In order to classify the factors he has gleaned from this extensive research, he created Model of Trust for E-Commerce (MoTEC) and various tools. Through iterative development, evaluation, and refinement, the model describes four dimensions: pre-interactional filters, interface properties, informational content, and relationship management.

Figure 1 The four dimensions of MoTEC



He believes one's level of trust fluctuates during interaction with the website, but that there is an initial trust value before even accessing a website. He believes this view is supported by a 2-stage exploration and commitment trust model (McKnight, 2000), and impressionistic judgment and dynamic cognitive evaluation model (Briggs, 2003).

2.2 Computer Mediated Communication (Riegelsberger et al, 2003)

A methodological foundation for HCI and computer-mediated communication (CMC) was established by Riegelsberger, Sasse, and McCarthy. They examined various trust game formats arguing that the Prisoners Dilemma, a synchronous method currently in vogue with roots in economics, is too limited.

They believe that mediated interactions introduce risks that are not obvious due to context and culture, thus making risk more difficult to evaluate. They

indicate that individual decisions are colored by whether outcomes are perceived as gains or losses; people tend to avoid loss before risking gain (Kahnemann et al. 1982). Instead they recommend asynchronous social dilemma trust games to collect much broader data.

2.3 Trust and Distrust (Tomlinson and Lewicki, 2000).

This report analyses work that distinguishes trust and distrust as separate constructs. A trustor's confident positive expectations regarding the trustee's conduct is called trust, while confident negative expectations define distrust.

Distrust can be good and helps protect one from exploitation. It prods one to examine risks and ways to minimize them, reducing the sense of vulnerability. Tomlinson and Lewicki further explain that "negative information weighs more heavily in human judgment", so if you enter a transaction and your trust is violated, you are more affected than if you began predisposed to distrust, mitigated risks, and then had a good experience.

Trust is hierarchical and builds in sequential stages. Early stages of a trust relationship are calculus based trust (CBT) and comparative to Egger's trustworthiness. This is applicable to online transactions because a customer will calculate the risks, rewards, deterrents, and control of the transaction and make a determination of possible harm. They have not built a trusting relationship, and may never share another transaction, so there is little emotional investment. Suggestions to strengthen the perception of trust by the vendor at this stage include demonstration of proficiency carrying out obligations, consistency, clarity about motives and intentions, share control, and acting with respect. A vendor can proactively create valid expectations by describing their business processes, and provide methods for monitoring such as order fulfillment and tracking shipments. Although these suggestions pertained to continuing interpersonal relationships, they can be implemented online. Furthermore, these measures are methods that obviate risk.

2.4 Definition of Trust (Mayer et al., 1995)

Mayer, Davis, and Schoorman developed a model for an organization setting involving two parties. They believed their model to be the first to consider both the trustor and trustee and acknowledge that perceptions of the trustee will affect the outcome of the decision to engage in actual trusting behavior. Their definition of trust is further advanced to be the *actual taking of risk*, not just the willingness to trust. Important distinctions are made between trust and

cooperation, because cooperation can occur without trust. They recognize that propensity to trust influences the initial meeting and its outcome. They state that propensity to trust remains constant no matter the situation, which sounds like a character trait. Propensity to trust is not affected by who the trustee is. Even though originally applied to organization theory, this report is referenced by many researchers and theorists on the subject of online trust.

Cognitive and affective trust are defined and reviewed as to how cues are processed. They identify dimensions of trust: risks, structure, and sources of vulnerability, which differ depending on context, and similar to Riegelsberger, recommend their version of asynchronous Trust Games to capture these dimensions.

The model forwards three characteristics of the trustee that determine trustworthiness: ability, benevolence, and integrity. All these characteristics are dependent on the perceptions of the trustor. Since this theory was conceived in an organization setting, there is discussion regarding how low any of these three factors can be before a high predisposition to trust is undermined. Their proposition 3 is the most apropos to ecommerce in that perception of integrity seems to have the most effect absent other data.

Mayer's research and model lead to the idea that the propensity of trust will outweigh distrust unless there are cues signaling distrust. They "propose that the level of trust is compared to the level of perceived risk." In fact it must be compared and acted upon before trusting behavior occurs. They say trust carries no risk until acted upon and focus on trusting behavior, and infer that the consequences are determined by the context such as the stakes involved, the rewards versus the risks.

2.5 First Contact (Xiao and Benbasat, 2003)

A particularly cogent study by Xiao and Benbasat targeted users' first contact with Recommendation Agents. They were interested in initial interactions as well as continuing interactions and found that their test subjects formed both trust and distrust at the same time, and the initial interactions form the basis for a continuing attitude of trust. This is because a user processes cues and spends more cognitive effort during this first interaction. Their recommendations applicable to website vendors are to facilitate initial interactions. And their data show that further study is needed regarding distrust prevention.

2.6 Erik Erikson, Trust and Human Development (Wu, 2004)

A Socio-emotional theory of human development may be applicable to early use or initial contact of ecommerce as well as experiences with new vendor sites. Erikson's first of eight stages of psycho social development is infancy where humans learn to trust caregivers as long as needs are met consistently and responsively. This influences their trust level of the environment in general. In other stages humans acquire their ability to assess situations and make independent decisions, learn to take control rather than allowing themselves to be controlled. It is striking how these stages seem to explain predisposition to trust, and the same factors that enabled or hindered that development relate to decisions regarding initial interactions with ecommerce. For instance, as long as the users requirements are met, they will continue to trust or distrust as per their predisposition. Factors that detract have the ability to negatively impact that state. So it is important to support the trusting behavior and at the same time to avoid distrust engendering factors.

2.7 Research on Distrust Factors

Other research supports the idea that more study is needed regarding reducing or avoiding distrust.

2.7.1 Online Banking. Kim and Prabhakar studied initial trust related to adoption of online banking. They believe there is a paucity of information regarding risk or distrust in previous research (Kim and Prabhakar, 2000).

2.7.2 Predisposition to trust. McKnight et al. posit that "the processes by which trust forms initially are not the same as those by which it forms later" and is greatly determined by predisposition to trust as well as whether that trust is fragile (can change from low to high or high to low easily and quickly) or robust (not likely to change easily or quickly) (McKnight et al., 1998).

One can infer that those with a predisposition to trust ecommerce don't need support for this state, but do need support against distrust factors. We don't need to focus our attention on those with a robust predisposition to trust. Those with a predisposition to distrust will assess risk and in the absence of cues of distrust, are more likely to complete the transaction than if there are cues for distrust. That means we need to focus our attention on those with fragile trust.

2.7.3 Online Auctions. An hypothesis of Chong, Yang, and Wong, is that "[n]egative attributes of trust (attributes of distrust) will have greater impact on

Perceived Value than positive attributes of the same trust attributes”. Since their study encompassed multiple cultures, they also say that people from an individualistic culture such as the US have a higher propensity to trust in general. Related to online auctions they believe that uncertainty avoidance does not equal risk avoidance, but it refers to how comfortable people feel toward uncertain or unknown situations (Chong, et al., 2003)

3 Preventing Distrust

The studies reviewed in this report indicate that ecommerce should focus on eliminating those factors that incite distrust, thereby reducing need for calculation of risk and cognitive load. A vendor can build trust if the customer returns many times for additional purchases. Trust in ecommerce as a method of shopping can be built over several transactions with multiple vendors and may be a separate area of study. Trust can only be achieved through a series of transactions, so focusing on trust enablers doesn't have as much impact at initial contact.

3.2 What do the experts say about distrust?

3.2.1 Trust is built through iterations of risk taking. Riegelsberger et al. recognize the contradictions of designing technology for trust when trust is “won through iterations of risk taking” (Riegelsberger et al. 2003).

3.2.2 Trust and distrust are separate. Tomlinson and Lewicki described recent work supporting the multidimensionality of trust and that “trust and distrust exist along separate dimensions.” This means that visitors are alert to contributors that reinforce their preconceptions. So initial contacts online need to support, or at least not violate, expectations of trust and also actively counteract expectations of distrust (Tomlinson and Lewicki, 2003).

4 Implications

Perhaps researchers who focused on trust enablers rather than distrust avoidance are missing the point. One can assume that previous experiences, whether direct or transferred, are the basis for opinions as to the trustworthiness in general of online transactions. I believe that absent previous experiences and biased transference, most people will enter a new online experience ready to trust or to distrust depending on previous life experiences.

If one is predisposed to trusting, then a successful new experience depends on not finding anything that detracts from that state. If one is predisposed to distrusting, then they will be actively looking for cues that reinforce that state.

As ecommerce becomes ubiquitous and after gaining more experience with successful transactions, one's confidence grows, one learns what to expect, can discern better interfaces, and may become judgmental about what constitutes a good vendor site. Expectations rise with each experience of a superior site, and acceptance of adequate sites along with a feeling of control ensues. As this experience and knowledge grows, one might even start sending comments and suggestions to webmasters for improvement of the site.

It makes sense not only to support trustworthiness, but to avoid cues that engender distrust. Violating expectations of trust (bad things happening to trusting people) has a greater impact than violating expectations of distrust (good things happening to distrusting people). This means we should not only concentrate on support of trustworthiness cues but maybe more importantly avoid cues of distrust.

How do we avoid sending cues of distrust or untrustworthiness? Be upfront about the process and follow through. If purchases take several steps, then each step must support, deliver, allow for changes, present choices, and encourage a sense of user control. Be fair; give feedback that encourages accuracy and understanding of the users choices.

5 Where do we go from here?

I believe the next step is to review Egger's MoTEC and determine if it can be modified to test for distrust factors. A variation of many of these factors are currently considered trust enabling and included in his model.

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