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THE ROLE OF VALUE COMPATIBILITY IN TRUST PRODUCTION AND E-COMMERCE

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Abstract

This paper explores the role of value compatibility and trust in the ecommerce environment. Specifically, we explore how the perceived actions or lack of actions of organizations regarding moral, social, environmental and political issues affect ecommerce users in their trusting beliefs and their behavioral intentions toward those organizations. This is accomplished through having subjects rate the perceived value compatibility of different organizations along with testing their trusting beliefs and behavioral intentions. Trust is a multi-dimensional construct (McKnight et al., 2002) and is analyzed along the dimensions of ability, benevolence and integrity proposed by Mayer et al. (1995), McKnight et al. (2002), and Bhattacharjee (2002). The data is then analyzed using Structural Equation Modeling (SEM) in LISREL. In a pilot survey; we found support for value compatibility affecting trust strongly through the benevolence dimension and somewhat through the integrity dimension. We also found a direct link of value compatibility to behavioral Intentions. This demonstrates that value compatibility plays an important role in trust production and also has an effect on ecommerce through other mechanisms. Organizations would benefit from a deeper understanding of the role played by value compatibility in ecommerce.

Keywords: Trust, e-commerce, value compatibility, and value congruence

Introduction

Concerns about privacy and lack of online trust were among the most important factors that lead customers to drop out of online business.
—Lou (2002)

Trust is a critical factor in stimulating purchases over the Internet, especially at this early stage of commercial development.
— Quelch & Klein (1996)

Trust is one of the most important factors in the growth and development of electronic commerce. Without trust, little social exchange would take place. Jarvenpaa et al. (2000) propose that trust is a precursor to a potential customer's willingness to buy from an ecommerce site. Quelch & Klein (1996) argue that trust is a critical factor in stimulating Internet purchases. Lou (2002) asserts that lack of online trust is one of the most important factors leading people to drop out of online business. Ba and Pavlou (2002) found that high levels of trust lead to the ability of vendors to charge price premiums. Brynjolfsson and Smith (2000) found that retailers with the lowest price do not receive the most sales and that trust was an important source of the differences. The recent rash of dot com failures demonstrate the need for improving the degree of trust in online systems. With a greater amount of trust, many of these organizations would be better able to alleviate customers concerns about doing business with them and have a better chance of staying in business.

This paper looks at one of the often-overlooked factors contributing to trust, the concept of value compatibility, or shared values. Value compatibility has been shown to build trust in ecommerce systems (Cazier et al, 2002) and can be an important piece in building (or destroying) trust with customers and potential customers. This study makes an important contribution to the literature by analyzing the relationship of value compatibility to trust, and by looking at its direct effect on behavioral intentions in addition to its indirect effect on intentions through trust.

Literature Review

Trust

Trust is defined as *the willingness to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party* (Mayer et al., 1995). The willingness to be vulnerable is a key component of trust. In doing business online, customers are putting themselves in a vulnerable position. They are giving financial and personal information to the vendor, information that could potentially be used to commit identity theft or fraud. In order to engage in online transactions, clients need to trust vendors enough to be willing to put themselves in a vulnerable position.

When setting up any experiment that looks at trust, it is important to realize that trust is not a unidimensional construct. McKnight et al. (2002) performed a rigorous study of trust where they found and demonstrated that trust is a multi dimensional construct. They found that people hold specific beliefs with respect to particular attributes (ability or competence, benevolence, and integrity) rather than broadly trusting or not trusting. Trust in turn is found to have a significant impact on behavioral intentions.

Mayer et al. (1995) had previously proposed the three dimensions of trust, based on a comprehensive literature review and theoretical development, which McKnight later tested. *Ability*, also referred to as competence in some of the literature, is the group of skills, competencies and characteristics that enable a party to have influence within some specific domain. *Benevolence* is the extent to which a trustee is believed to want to do good for the trustor, aside from an egocentric profit motive. *Integrity* is trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable.

Based on theory and prior research, we have the following model of the dimensions of trust and how they are affected by the perceptions that individuals have regarding the ability, benevolence and integrity of the organization, which we presented in Figure 1.

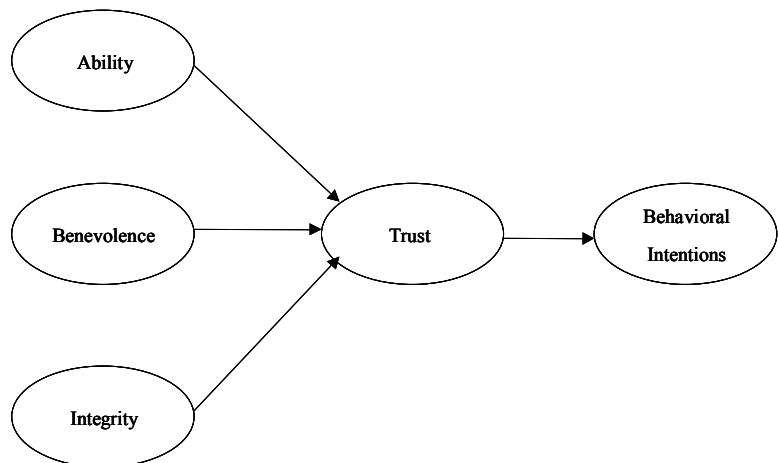


Figure 1. Model of Trust

Values

Values are referred to as desirable states, objects, goals or behaviors, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behavior (Elizur and Saige, 1999). Thus a value is a principal or standard of an individual or group. Examples of values include the sanctity of life, equal rights in the workforce, ecological diversity, etc.

A few well-publicized examples of companies with perceived values are presented here to illustrate the impacts of a given set of values on trust and customer loyalty. The Body Shop was founded by Anita Roddick in 1976 in Brighton, England. It has been known for being environmentally responsible and has been promoting such values actively. The Body Shop produces biodegradable products and supports responsible care of communities in the third world, good environmental stewardship, and social responsibility. The company leverages on these values to help grow its sales and build strong customer relations.

Similarly, Ben & Jerry's Ice Cream also promotes what it perceives to be environmental stewardship. These and other companies have been able to build a niche market with a certain group of customers who are attracted to them because both parties share important values. This often results in greater customer loyalty and trust as they concur with the causes the companies support. The increase in trust from shared values also may increase a customer's willingness to disclose personal information to these organizations. These and other companies all try to appeal to clients by promoting shared values. These shared values nurture trust and loyalty.

The American Family Association (AFA), through its subsidiary websites www.onemillionmoms.com and www.onemilliondads.com has launched attacks against Amazon.com, Yahoo.com and Juno.com for allegedly doing things

offensive to the values that the AFA supports. Disney and Kmart are other companies that recently have encountered a value conflict with the American Family Association and Southern Baptists. Both groups called for a boycott for what they regarded as anti-family values. This is another example of companies suffering and losing trust from a certain group when promoting values that the group considered offensive. It is hard to measure the impact the boycott has had on the companies, but it is clear that at least a certain group of people reacted negatively to companies that exhibit values and practices that they oppose. This demonstrates that it can be important for organization to be cognizant of the values of their customers and how they may react to certain actions or inactions by the organization.

Each person has a set of values based on their personal backgrounds and beliefs. Each organization also has a set of perceived values. In some cases, the company will be perceived as neutral, or not having any significant leanings for or against the causes the customer is interested in. We call this case a *Value Neutral Organization* to that customer. If the organization's perceived values and the individual's values are highly correlated, this is called a *Value Positive Organization*. This means that, to the customer, there is high compatibility between the customer's and the organization's values. If the organization's perceived values and the customer's values are negatively correlated, we call this case a *Value Negative Organization*. This means that, to the customer, there is a strong conflict between the individual's and the organization's values.

It is important to note that the organization's values are based on the perception of the customer. Positive value compatibility is not an endorsement of that value but an indication that the company's and the customer's values match. It is thus not a judgment on the merits of those values. A company that is value positive for one customer may be value neutral or negative to another customer. It is the effect of the correlation of the organization's value and the customer's value that we intend to study.

Table 1. Value Combinations

Individual Values	Organizations Values		
	Match	Neutral	Conflict

Table 1 illustrates the possible combinations of values between organizations and customers. If the organization supports a value that the customer supports, they will have a match in values and the organization is expected to receive some benefit from that trust match. If the organization opposes an customer's given value, they are expected to conflict with each other and the organization is likely to lose trust due to the conflict. If the organization's values neither match nor oppose the customer's values, then there is no expected benefit or liability from this scenario.

Value compatibility is not a new concept. It has been interchangeably called value similarity in the marketing literature (e.g., Ang et al., 2000) and value congruence in the organizational science literature (e.g., Jung and Avolio, 2000). Value compatibility is a measure of how closely an customer's personal values and the perceived values of an organization overlap. The more they have in common, the greater the similarity of customer and organizational values. However, values do not have to be identical to be compatible. In order to be compatible, values only need to be similar enough to support common causes and avoid clashes over issues important to the customer and the organization.

Siegrist et al. (2000) argue that shared values determine social trust in institutions and persons related to technology, and one has greater trust in those parties holding similar values. Jung and Avolio (2000) look at the level of congruence of values between leaders and followers and find that value congruence plays an important role in a leader's success. Chen et al. (2002) found that compatibility, defined as an innovations compatibility with existing values and beliefs, was a significant indicator of a person's attitude toward using a new system.

Zucker (1986) indicates three types of trust commonly used to produce trust in organization and facilitate social exchange; these are process-based trust, institution-based trust, and characteristic-based trust. *Process-based trust* stimulates trust through a process of social exchange and experience between organizations and customers. Successful experiences build trust in future exchanges. *Institution-based trust* is the production of trust through a third party effect. This could be a government, bank or other organization that assures the trustworthiness of the other organization. Examples of this type of trust in ecommerce are organization like Truste and BBBonline that put a trust or privacy seal on an ecommerce website to certify that certain practices or policies are in place.

Characteristic-based trust promotes trust based on the characteristics of individuals or organizations. Trust is produces by a since of communality with the other. This could be similar values, background, ethnicity or experiences. Trust is increased by either having something in common or possessing a characteristic the trustor finds desirable. In this study we look at one type of

characteristic-based trust in which shared or conflicting values and beliefs between a potential customer and an organization have an effect on trust and behavioral intentions of the potential customer.

Hypothesis

Given the work of Zucker (1986) on value similarity being one mechanism for producing trust based on characteristics and the prior work of Cazier et al. (2002) on shared values creating trust, we propose the following hypothesis.

- **H1:** *Individuals who perceive themselves as having **positive** value compatibility with an organization will have a **greater** level of trust for that organization.*

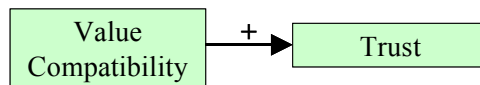


Figure 2. Value Compatibility and Trust

Mayer et al. (1986) and McKnight et al. (2002) demonstrate that trust is a multi dimensional construct based on the factors of Ability, Benevolence and Integrity. While there is some evidence that value compatibility affects trust, it is uncertain which dimension or dimensions of trust value compatibility acts through. It is proposed that value compatibility affects trust through the identified dimensions of trust and that the following hypothesis apply.

- **H1a:** *Individuals who perceive themselves as having **positive** value compatibility with an organization will have a **greater** level of trust through the **Ability** factor for that organization.*
- **H1b:** *Individuals who perceive themselves as having **positive** value compatibility with an organization will have a **greater** level of trust through the **Benevolence** factor for that organization.*
- **H1c:** *Individuals who perceive themselves as having **positive** value compatibility with an organization will have a **greater** level of trust through the **Integrity** factor for that organization.*

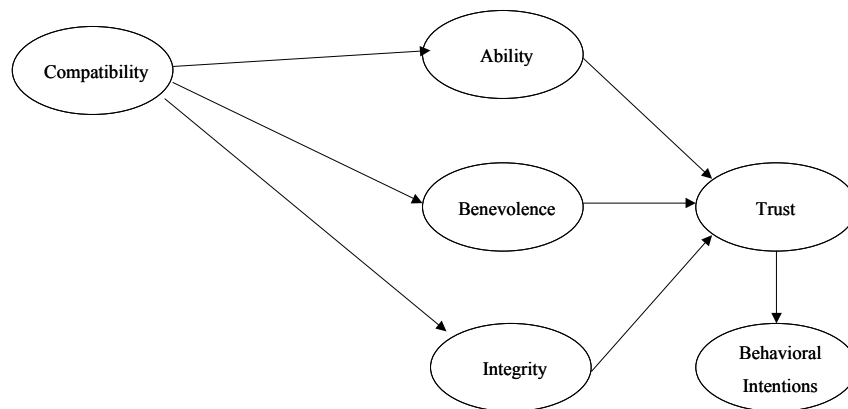


Figure 3. Value Compatibility Model

Figure 3 shows the impact of value compatibility on the dimensions of trust. In addition to the indirect effect of value compatibility on behavioral intentions through trust, it is likely that value compatibility also has a direct effect on behavioral intentions. While trust is an important factor in predicating consumer behavior, it is not the only factor. Having a shared set of values may create a desire to help the organization with the cause that they share. People may want to do business with an organization because they like them. Conversely, if there is a value conflict they may not want to interact with the organization

even if they trust them due to dislike or disagreement with their mission. This leads to the hypothesis below and the model in Figure 4.

- **H2a:** Individuals who perceive themselves as having **positive** value compatibility with an organization will be **more willing** to transact with that organization.
- **H2b:** Individuals who perceive themselves, as having **negative** value compatibility with an organization will be **less willing** to transact with that organization.

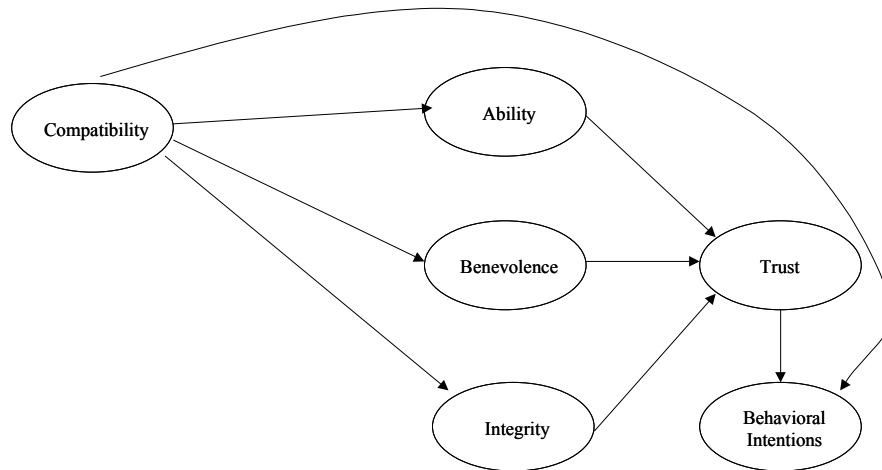


Figure 4. Value Compatibility Trust Model

Methodology

The initial focus of this work will be with online non-profit organizations. Non-profit organization, that actively support a given set of causes are ideal for the initial investigation into the role of value compatibility and its effect on trust and behavioral intentions. The causes that these organizations support are usually apparent and easily identifiable to subjects. These organizations actively seek funding sources from donors who believe in their mission and are willing to help. Value compatibility likely plays a role in other types of online transactions. However, it is expected to be the strongest with non-profit organizations seeking funding online.

The hypothesis will be investigated through an in depth survey. Subjects will initially be asked several questions, similar to ones asked by McKnight et al. (2002) to get a feeling for their initial levels of trust in society and the internet. McKnight et al. (2002) and Mayer et al. (1995) both refer to this as an individual’s propensity to trust. Subjects will then be exposed to various online organizations at random. Each subject will only see one particular website.

Organizations will be chosen that are expected to promote a wide reaction of supporting and opposing values from our subjects to provide adequate dispersion to get a good test of the model. They will then be asked a series of questions regarding how they perceive and rate their value compatibility, levels of trust on each dimension (Ability, Benevolence and Integrity), and behavioral intentions with the demonstrated organization.

After doing exploratory factor analysis (EFA) and analyzing the reliability of the scales, results will be analyzed using Structural Equation Modeling (SEM). Each question will be on a 7-point Likert scale (agree/disagree) to allow the data to be closer to continuous form for a better analysis. SEM has been used by McKnight et al. (2002) and Bhattacharjee (2002) to explore and analyze trust issues on these dimension and many of the trust questions will be adapted from these sources.

Current Standing and Preliminary Findings

In a pilot study conducted on 108 subjects we found support for value compatibility having a strong impact on the *Benevolence* dimension of trust and a significant impact on the *Integrity* dimension. We found no significant impact of value compatibility on the *Ability* dimension. This gives us important insight into how trust is affected by value compatibility. Value compatibility increases (or decreases) trust very strongly through the benevolence factor. Since benevolence is the extent to which a trustee is believed to want to do good for the trustor, aside from an egocentric profit motive, the perception of shared values increases the perception that the organization has the trustor's best interest in mind.

Value compatibility also has a significant positive effect on integrity, the lower in magnitude then the effect through benevolence. Integrity is the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable. It is then reasonable that if the trustor and trustee have similar value that the trustor will find the trustee's values acceptable in most cases, which would have a positive effect on trust.

The ability dimension of trust was not significantly affected by perceptions of value compatibility. Indicating that value compatibility did not significantly influence the perception of the organizations skills, competencies and characteristics. Very strong support was found for the impact of value compatibility directly on behavioral intentions, indicating that value compatibility may play more of a role in ecommerce than that suggested by its effect on trust alone. The next step is to do a full-scale analysis of trust and value compatibility in a variety of context and compare and test different models for further analysis.

Conclusions

This work makes a valuable contribution to the literature by exploring the effect of value compatibility on trust and on behavioral intentions. A greater understanding of trust and its antecedents is an important piece of the puzzle in understanding ecommerce in society and what encourages and discourages individuals to participate or not in this medium of exchange. This study demonstrates that values play an important role in the development of trust in ecommerce and has an important effect on behavioral intentions of customers.

References

- Ang, S. H., Leong, S. M., and Teo, G. P. S., "The Effects of Personal Value Similarity on Business Negotiations," *Industrial Marketing Management*, Vol. 29, 2000, pp. 397-410.
- Ba S. L., Pavlou P. A., "Evidence of The Effect of Trust Building Technology In Electronic Markets: Price Premiums and Buyer Behavior", *MIS Quarterly*, Vol. 26 No. 3, September 2002, pp. 243-268.
- Bhattacharjee, A., "Individual Trust in Online Firms: Scale Development and Initial Test", *Journal of Management Information Systems*, Vol. 19 No.1, 2002, pp. 213-243.
- Brynjolfsson E., Smith M. D., "Frictionless commerce? A comparison of Internet and conventional retailers", *Management Science*, Vol. 46 No. 4, April 2000, pp. 563-585.
- Cazier, J., Shao, B., and St. Louis, R., "Personal Privacy Preferences in E-Business: A Focus on Trust and Value Compatibility", *Americas Conference on Information Systems*, August 2002, pp. 2204-2212.
- Chen, L., Gillenson, M.L., and Sherrell, D. L., Enticing online consumers: an extended technology acceptance perspective, *Information and Management* (39) 2002, pp 705-719
- Elizur, D., and Sagie, A., "Facets of Personal Values: A Structural Analysis of Life and Work Values," *Applied Psychology: An International Review*, Vol. 48 No.1, 1999, pp. 73-87.
- Jarvenpaa, S. L., Tractinsky N., and Vitale M., "Consumer Trust In An Internet Store," *Information Technology and Management*, Vol. 1, 2000, pp. 45-71.
- Jung, D. I., and Avolio, B. J., "Opening the Black Box: An Experimental Investigation of the Mediating Effects of Trust and Value Congruence on Transformational and Transactional Leadership," *Journal of Organizational Behaviour*, Vol. 21, 2000, pp. 949-964.
- Luo, X., "Trust Production and Privacy Concerns on the Internet: A Framework Based on Relationship Marketing and Social Exchange Theory," *Industrial Marketing Management*, Vol. 31, 2002, pp. 111-118.
- Mayer, R. C., Davis, J. H, and Schoorman, F. D., "An Integrative Model of Organizational Trust," *Academy of Management Review*, Vol. 30 No. 3, 1995, pp. 709-734.

- McKnight, D.H., Choudhury, V., Kacmar, C., “Developing and Validating Trust Measures for ecommerce: An Integrative Typology”, *Information Systems Research*, Vol. 13, No. 3, September 2002, pp. 334–359.
- Quelch, J. A. and Klein, L. R., “The Internet and International Marketing”, *Sloan Management Review*, Vol. 37 No. 3, 1996, pp 60-76.
- Siegrist, M., Svetkovich, G., and Roth, C., “Salient Value Similarity, Social Trust, and Risk/Benefit Perception,” *Risk Analysis*, Vol. 20 No. 3, 2000, pp. 353-362.
- Zucker, L. G., “Production of Trust: Institutional Sources of Economic Structure, 1840-1920” *Research in Organization Behavior*, Vol. 8, 1986, pp 53-111.