E-business differentiation through value-based trust

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Abstract

For e-business, location is irrelevant and competition is intense. To succeed in this environment, organizations must find new ways to differentiate themselves from their competition. One way to achieve e-business differentiation is to foster trust by building a perception of value congruence and avoiding a perception of value conflict. We explore how value congruence contributes to and how value conflict decreases trust in e-businesses. An experiment was conducted to examine the respective impacts of value congruence and value conflict on trust in an e-commerce setting. Our results show that, for e-businesses, value congruence has an enabling effect on trust while value conflict reduces trust. Such effects are strong enough to suggest that value congruence can be employed as an effective way for e-businesses to differentiate themselves while creating and sustaining competitive advantage. Managerial implications are drawn from our results.
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1. Introduction

Trust makes business possible. Without it, few transactions would occur. Consumers must trust a seller to deliver a product as agreed. Clients may also refuse to do business if they do not trust the security and privacy practices of the vendor. In the brick-and-mortar world, customers can alleviate their concerns through face-to-face interaction with a human; physical presence of the business offers assurance that it exists, is accessible, and is trustworthy. In the online virtual marketplace, it is difficult to develop such trust.

Building and marketing a business in the online world poses unique challenges. When the well-known four P's

(product, price, promotion and place) of marketing were developed in the 1960s, place was considered important. The four P's have been extensively studied by researchers and employed by practitioners [2]. However, online businesses need a new model for success, as place has become an irrelevant factor in this arena. Wilson and Abel [42] claimed that on the Internet location has become a non-issue, and with the declining importance of place, other factors are more critical. A new factor that may substitute for place is *perception*, including the customer's perceptions of trust, value congruence, and other factors that motivate customers to complete a transaction. As competition turns intense in e-commerce, perception may be very influential and perceived value congruence can become more important. With the competition just a click away, e-businesses must find other ways to distinguish themselves from competitors.

Trust has been identified as a critical success factor for businesses. It is therefore imperative to study how

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online consumer trust is promoted and cultivated [20]. Luo [22] argued that lack of online trust is a main reason that people drop out of online business transactions. Without sufficient trust, they are unwilling to engage in e-commerce. Brynjolfsson and Smith [7] reported that an online retailer with the lowest prices does not necessarily register high sales for its products. They argued that this result is partially due to differences in the levels of trust in online sellers. As a consequence, some Internet businesses have to lower their prices to compensate for less consumer trust—a practice that may hurt their long-term profitability and sustainability. Ba and Pavlou [4] found that high levels of trust allowed vendors to charge price premiums.

Quelch and Klein [30] showed that trust is a key factor in stimulating Internet purchases, especially at the early stages of commercial development. Greater levels of trust often lead to greater margins, more sales, and higher profits; these are crucial for the survival and prosperity of online business. At an international level, Huang et al. [15] found that trust is an important factor in increasing the Internet's penetration and usage.

However, much work still needs be done to determine the production of trust in e-business. Our paper attempts to look at the role played by value congruence (conflict) in creating (destroying) trust. Value congruence or compatibility is a measure of the amount of overlap between the values of customers and those values they believe the organization possesses. The sharing of values, backgrounds, and beliefs has been empirically demonstrated to produce trust between persons that share common values [8].

While many other factors can influence trust in e-business, value congruence may be unique and particularly important. The durability of affect-based trust created through value congruence makes it more desirable than trust created by other means. This qualitative difference sets value congruence apart and merits further study and evaluation. In this study, we examine the relationship between value congruence and trust to analyze how sellers in the online marketplace can harness this relationship.

2. Theoretical framework

2.1. Trust

Trust has been defined as "confidence in a person or thing because of the qualities one perceives" [29]. In the literature, the definition has been taken a step further to include the person's behavioral intentions as the "willingness of a party to be vulnerable to the actions of another party based on the expectations that the other one will perform particular actions important to the trustor, irrespective of the ability to monitor or control the other party" [23]. The latter definition replaces confidence with the willingness to be vulnerable and replaces qualities with how the trustee is expected to behave in the future.

While both definitions of trust are useful, the "willingness to be vulnerable" concept is especially important because online transactions tend to put buyers in a vulnerable situation. For example, when customers place an order online, they have to reveal sensitive personal and financial information, like address and credit card numbers, to the vendor. In order to engage in online transactions, customers need to trust vendors enough to put themselves in a potentially vulnerable position. Chow and Holden [9] found that e-commerce customers cannot physically interact face-to-face with a human representative, so they must rely on their trust in the organization when making purchases.

When we trust a person or organization, there is an increase in our likelihood of taking risks with them. In e-commerce, the potential risk is greater due to the anonymity, distance and lack of physical interactions. Therefore, the study of online trust is critical in understanding why people do or do not engage in e-commerce activities.

There are perceived risks in doing business online. By far, identity theft is the largest category and it represents one of the fastest-growing crimes in the U.S.; 43% of all complaints received by the Federal Trade Commission (FTC) were related to it [39]. In 2002, the FTC logged nearly 162,000 consumer complaints of identity theft, more than five times the 31,000 reported in 2000 [6]. Victims of identity theft can have their credit ruined; some have been repeatedly arrested for crimes committed by others using their identity and others have lost their jobs due to the criminal record resulting from the theft. Online job posting company Monster.com admitted that identity thieves had post-false job openings on its website in order to steal people's identities [10]. Fear of identity theft can deter Internet users from engaging in online business.

In the online world, it is relatively easy to set up a company that appears legitimate but is actually a fraud [27]. While fraud also exists in the physical world, the chance of becoming a victim there is relatively lower. In e-commerce, there is typically a delay between the time of payment and the receipt of the goods; this delay leads to greater perceived risk. In addition, there have been a large number of reported fraud cases that increased consumers' perceptions of risk. A high level of trust can help overcome such negative perceptions [21].

Jarvenpaa et al. [16] argued that trust is a precursor to willingness to buy from an e-commerce website. Both Amazon.com and eBay have put in place seller rating systems to engender trust from their customers; many other websites have followed suit. With the time and distance separation, the significance of trust in online transactions is likely to increase.

2.2. Types of trust

Zucker [43] identified three ways to create trust: process-based, institution-based, and characteristic-based. *Process-based trust* is created through social exchange between organizations and individuals. Successful experiences build trust for future exchanges. This closely parallels social exchange theory, which suggests that people look beyond the short-term transactions and evaluate long-term relationships and gains.

Institution-based trust is created through a third party. This may be a governmental agency, a bank, etc. that assures the trustworthiness of the organization. Examples of this in e-commerce are TRUST-e and BBBonline; they put a seal on an e-commerce website to certify that certain practices or policies are in place. Srivastava and Mock [37] discussed how this type of trust accounted for the American Institute of Certified Public Accountants' WebTrust Assurance Program. Kaplan and Nieschwietz [19] demonstrated that such web services do increase trust.

Characteristic-based trust is created through a sense of shared commonality with the other party. This can result from similar values, backgrounds, ethnicity and experiences. Trust is increased by having something in common or by possessing a characteristic perceived to be desirable. For instance, the greater the cultural similarity, the greater the level of trust in the partners.

We look at characteristic-based trust and explore how shared values between a customer and an organization affect trust production. Specifically, we examine the degree to which the values that a consumer perceives in an e-commerce organization are congruent with his or her own values, causes and view of society. Then we examine how that value perception affects his or her degree of trust in the organization.

2.3. Values

Values are desirable states, objects, goals or behaviors applied to judge and to choose among alternative modes of behavior [11]. They can be held by an individual or group. Examples include the sanctity of life, equal rights in the workforce, ecological diversity,

etc. The Body Shop based in Brighton, England has been known for being environmentally responsible and promoting its values actively. It produces biodegradable products and supports responsible care of communities in the Third World, good environmental stewardship, and social responsibility. The company has leveraged these values to help grow its sales and build strong customer relations [14,33]. Similarly, Ben & Jerry's Ice Cream of Vermont, U.S. promotes what it perceives as environmental stewardship and has attracted many loyal customers that agree with its values.

These two companies and others have been able to build a niche market with a group of customers who are attracted to them because they share important values. This sharing in values may lead to several extrinsic benefits, such as an increase in a customer's willingness to disclose personal information, customer loyalty, or a willingness to pay premium prices.

Being socially responsible is no longer the domain of small niche companies. As competition heightens, values and social responsibilities are becoming critical for all businesses. Fifty-four percent of Americans surveyed perceived a company's social performance as important when forming an impression of it; the social values included labor practices, business ethics, responsibility to society, and environmental impacts. Internationally, almost 60% surveyed considered such factors when evaluating a company [26].

An indication of the importance of values is the number and size of investment funds organized to invest in businesses that investors consider socially responsible. In 1999, assets in socially responsible portfolios reached US$ 2.2 trillion [38]. In 1999, more than 200 social shareholder resolutions were issued [35]. In addition, 56% of U.S. investors, both religious and non-religious, say that they incorporate faith or personal values into their financial decisions [17].

At the other extreme, the American Family Association (AFA) has launched condemnations against Amazon.com, Yahoo.com, and Juno.com for violating the values that the AFA supports. Disney and Kmart also have been reported to have value conflicts with the AFA and Southern Baptists. Both groups called for boycotts for what they regarded as anti-family values [41].

Another example of value conflict is Nike, which has long been the target of a multi-country boycott over the alleged sweatshop conditions in the factories of some of its Asian suppliers. To restore value congruence and goodwill after a 10-year battle for its public image, Nike hired over 90 people to promote social responsibility, terminate suppliers, and conduct regular third party audits of business practices. As noted by Smith [34],

safeguarding the corporate reputation and brand image is now important as markets have become more competitive and as reputations and image have become more vulnerable. Firms may be penalized by consumers and others for actions that are not considered socially responsible [36].

It is difficult to measure the specific impacts such actions or boycotts have had on companies, but it is clear that some people reacted negatively to them. We explore how perceived value congruence affects an individual's trust towards companies in an e-commerce setting.

2.4. Value congruence and conflict

Each person or organization possesses and projects a given set of values. In some cases, the organization's values will be perceived as neutral, or not providing any meaningful support for, or harm against, the causes that the potential customer supports or opposes. We call this a *Value Neutral Organization*. If the organization's perceived values and the individual's values are highly correlated, it is *Value Positive*. If its values and the individual's are negatively correlated, it is *Value Negative*.

It is important to note that the organization's values are based on the perception of the potential customer. Positive value congruence is not an endorsement of it, but an indication that the values match. A company that is value positive to one individual may be value neutral or negative to another.

Value congruence has been called value similarity in the marketing literature [3] and value compatibility in the organizational science literature. Values do not have to be identical to be compatible; they only need to be similar enough to support common causes or avoid clashes over issues important to the participants.

2.5. Trust dimensions

McKnight et al. [25] performed an in-depth analysis of trust and showed that it is a multi-dimensional construct. They found people hold specific beliefs with respect to particular attributes (i.e., competence, benevolence and integrity), rather than just being trusting or not. Mayer et al. [23] proposed the same three dimensions, based on review and theoretical development. *Ability* 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 the "trustor's perception that the trustee would adhere to a set of principles that the trustor finds acceptable."

Scott [31] looked at trust as being two-dimensional: cognition-based and affect-based. Cognition-based trust is a rational view that includes the previous ability and integrity dimensions. It can sometimes lead to affect-based trust, which is a social view with a more emotional connotation, corresponding to the previous benevolence dimension. McAllister [24] found that affect-based trust can influence cognition-based trust and remain strong even in the presence of logical evidence disconfirming the validity of a trusting perception. His work focused on interpersonal trust rather than non-personal trust in other entities.

With affect-based trust, parties will share information and knowledge over time and be less concerned with information leaks. Emotional ties and social similarity can help in developing affect-based trust. Individuals are likely to perceive those outside of their group as less trustworthy and uncooperative.

Siegrist et al. [32] argued that shared values determined social trust in institutions and persons, and that one had greater trust in parties that held similar values. Jung and Avolio [18] looked at the congruence of values between leaders and followers, and found value congruence resulted in greater trust in a leader. Based on the above arguments, we hypothesize that in e-commerce, value congruence creates trust and value conflict destroys trust:

H1. Value congruence is associated with higher levels of trust than value neutrality.

H2. Value conflict is associated with lower levels of trust than value neutrality.

3. Data collection

We conducted an experiment on 297 undergraduate business students. Each was randomly assigned to one of three different scenarios (treatments). The subjects were given a description of a hypothetical website and were asked questions about their level of trust in the e-business. Each website was for a generic online bookstore. The values of the company that owned the bookstore were not specified, but the respondents were told that the values of the company behind the site either matched, opposed, or were unknown with respect to the values they supported. By exposing the subjects to a hypothetical and general bookstore, we ensured that the trust engendered toward the e-business was not

influenced by characteristics other than a subjects' value perception. Because subjects were not shown a specific website and because the company was hypothetical, neither the specific website construction details (e.g., design, functionality, aesthetics, etc.) nor prior knowledge of the company could affect their level of trust.

In the first scenario, the subjects were informed that the organization they were visiting had values similar to their own. Specifically, they were presented with the following background statements:

- This organization *supports* the political and moral causes that I *support*.
- This organization *opposes* the political and moral causes that I *oppose*.
- This organization *does not support* any political or moral causes that I *oppose*.
- This organization *does not oppose* any political or moral causes that I *support*.

These statements were carefully chosen to build value congruence. They focused on political and moral causes because many individuals had strongly held beliefs about such causes. Our goal was to explore the relationship between value congruence and trust without binding to a specific value.

The following four trust questions were then asked. They were similar to those used in prior studies, like those in [5].

Trust questions—1–5 Likert scale, strongly disagree (1) to strongly agree (5)

- I would trust this organization to treat me fairly (benevolence).
- I would trust this organization to deliver on what it promises (ability).
- I would trust this organization to fairly represent its products (integrity).
- Overall, I would trust this organization (overall).

It is noted that we have only single item questions for benevolence, ability and integrity, so we could not be certain that we had fully captured these dimensions. Instead, we only could be certain that our questions captured the subjects' trust that the organization would treat them fairly, deliver on what it promised, and fairly represent its products. Thus benevolence here means treating customers fairly, ability means delivering on promises, and integrity means fairly representing products.

In the second scenario, the subjects were not given any background statements. Instead, they were told that the website they were visiting belonged to an organization with which they had never interacted and whose values were completely unknown. The four trust questions were the same as those in the first scenario.

In the third scenario, the subjects were presented with a set of background statements that were the reverse of the first scenario (e.g., This organization *opposes* the political and moral causes that I *support*, etc.). The four trust questions were the same as those in the first two scenarios.

We collected a total of 297 usable responses, with 100, 98 and 99 subjects for scenarios 1, 2 and 3, respectively. About 60% of the subjects were male and 40% were female. We computed the average of the three dimensions of trust. The difference between the average trust and the overall trust consisted in the weights used. For the average trust, the weights for each dimension were assumed equal (i.e., 1/3), but for the overall trust, each subject inherently assigned his or her own subjective weights. By computing and comparing both the overall trust and the average trust, we could determine whether the individual's weight on a given dimension was more or less than one-third. Based on the difference between the overall trust and the average trust, we found that the weights employed by subjects to arrive at their overall trust were less than one-third.

4. Estimation model, results and discussion

Because each subject responded to all four of the trust questions, a repeated measures ANOVA was conducted [28]. The design can be represented schematically as

Subject	Scenario	Trust questions
1	Congruence	Q1, Q2, Q3, Q4
–	–	–
–	–	–
–	–	–
n_1	Congruence	Q1, Q2, Q3, Q4
$n_1 + 1$	Neutral	Q1, Q2, Q3, Q4
–	–	–
–	–	–
–	–	–
$n_1 + n_2$	Neutral	Q1, Q2, Q3, Q4
$n_1 + n_2 + 1$	Conflict	Q1, Q2, Q3, Q4
–	–	–
–	–	–
–	–	–
$n_1 + n_2 + n_3$	Conflict	Q1, Q2, Q3, Q4

Table 1 presents descriptive statistics for the dependent and independent variables. The higher the mean for a trust variable, the greater the level of trust.

Table 1
Descriptive statistics

Description	Values	N	Mean	S.D.
Trust (benevolence)	1, 2, 3, 4, 5	297	3.12	0.89
Trust (ability)	1, 2, 3, 4, 5	297	3.29	0.87
Trust (integrity)	1, 2, 3, 4, 5	297	3.39	0.94
Dimensional average	1–5	297	3.26	0.77
Overall trust	1, 2, 3, 4, 5	297	2.97	0.92
Compatible group	0, 1	297	0.34	0.47
Neutral group	0, 1	297	0.33	0.47
Incompatible group	0, 1	297	0.33	0.47

We found that the mean of the overall trust variable (2.97) was very close to the baseline trust level (3.0) in a 5-point Likert scale, where respondents neither agree nor disagree with a specific trust statement. Table 2 breaks down the trust variables by treatment group and we found that the mean for each trust question was highest for the value positive (compatible) group, and lowest for the value negative (incompatible) group. The value of the Cronbach's alpha reliability coefficient for the four trust questions is 0.867, exceeding the commonly used threshold of 0.70.

The results of the repeated measures ANOVA are presented in Table 3. They show that the value congruence factor is statistically significant ($p < 0.0000$). Our interest, however, is not in whether the means for the three groups differ, but rather in H1 and H2. Table 4 reports the means and standard errors for the different groups. The difference between the means for value congruent and the value neutral group is positive (0.369) and statistically significant ($p = 0.00012$), thus supporting H1. The difference

between the means for value conflict and value neutral is negative (-0.391) and significant ($p = 0.00005$), supporting H2.

The questions used for the three trust dimensions are discriminating enough to be regarded as distinct constructs ($p < 0.0000$), although the Cronbach's alpha shows that they share enough variance to be associated with a common latent variable of trusting beliefs. By testing for the significance of the differences in the means for each dimension, we found that all of the differences were significant at the 0.05 level: the p-value for integrity (3.39) minus ability (3.23) was 0.01537, the p-value for ability (3.23) minus benevolence (3.12) was 0.00008, and the p-value for benevolence (3.12) minus overall (2.97) was 0.00045. For the benevolence question and the overall trust question, the mean was close to three, which is essentially neutral. For the ability and integrity dimensions, the mean is on the trusting side of the scale.

The interaction effect between the value congruence factor and the trust dimension factor is not statistically significant ($p = 0.303$). Fig. 1 illustrates this by plotting the means for each combination of value congruence (compatible, neutral, incompatible) and trust dimension (benevolence, ability, integrity, overall). The lines are nearly piecewise parallel for each factor level. For each trust dimension, value congruence is thus associated with a higher level of trust than value neutrality, and value conflict is associated with a lower level of trust than value neutrality.

Although the interaction effect is not significant, the two points where the lines deviate the most from being piecewise parallel are associated with the mean for the value compatible-benevolence cell (cell 1, 1).

Table 2
Descriptive statistics by group

Description	Compatible group			Neutral group			Incompatible group		
	Mean	N	S.D.	Mean	N	S.D.	Mean	N	S.D.
Trust (benevolence)	3.57	100	0.78	3.06	98	0.86	2.72	99	0.83
Trust (ability)	3.60	100	0.79	3.30	98	0.85	2.97	99	0.86
Trust (integrity)	3.74	100	0.77	3.44	98	0.81	2.98	99	1.06
Dimensional average	3.64	100	0.66	3.27	98	0.71	2.89	99	0.75
Overall trust	3.35	100	0.86	2.99	98	0.81	2.56	99	0.92

Table 3
Repeated measures ANOVA results

Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-value	p-Value
Value congruence	2	114.794	57.397	28.98	0.000
Trust dimension	3	30.952	10.317	33.11	0.000
Value congruence × trust dimension	6	2.246	0.374	1.20	0.303

Table 4
Means and standard errors

Term	Count	Mean	S.E.
Value congruence (V)			
1: Compatible	400	3.57	0.070
2: Neutral	392	3.20	0.071
3: Incompatible	396	2.81	0.070
Trust dimension (T)			
1: Benevolence	297	3.12	0.032
2: Ability	297	3.29	0.032
3: Integrity	297	3.39	0.032
4: Overall	297	2.97	0.032
V × T			
1 × 1	100	3.57	0.055
1 × 2	100	3.60	0.055
1 × 3	100	3.74	0.055
1 × 4	100	3.35	0.055
2 × 1	98	3.06	0.056
2 × 2	98	3.29	0.056
2 × 3	98	3.43	0.056
2 × 4	98	2.99	0.056
3 × 1	99	2.72	0.056
3 × 2	99	2.97	0.056
3 × 3	99	2.98	0.056
3 × 4	99	2.56	0.056

This mean (3.57) is higher than would be expected given the effects for value compatibility and benevolence.

One obvious limitation in our study exists. Because we only had single item questions for benevolence, ability and integrity, we cannot be certain that we have fully captured these dimensions of trust.

5. Managerial implications

Several practical implications can be drawn from our findings. First, value congruence helps build trust but value conflict reduces it. If an organization can identify a target group that cares deeply about a specific set of values that it supports, it can benefit from the goodwill of that group. It may also allow the organization to charge a price premium, induce more customers to share private information, or enjoy higher customer loyalty.

This importance of online trust based on value congruence is likely to increase in the future, compared to other factors like security. During the early days of e-commerce, the ability to provide secure transactions was considered an important factor in encouraging customers to purchase online. However, as people
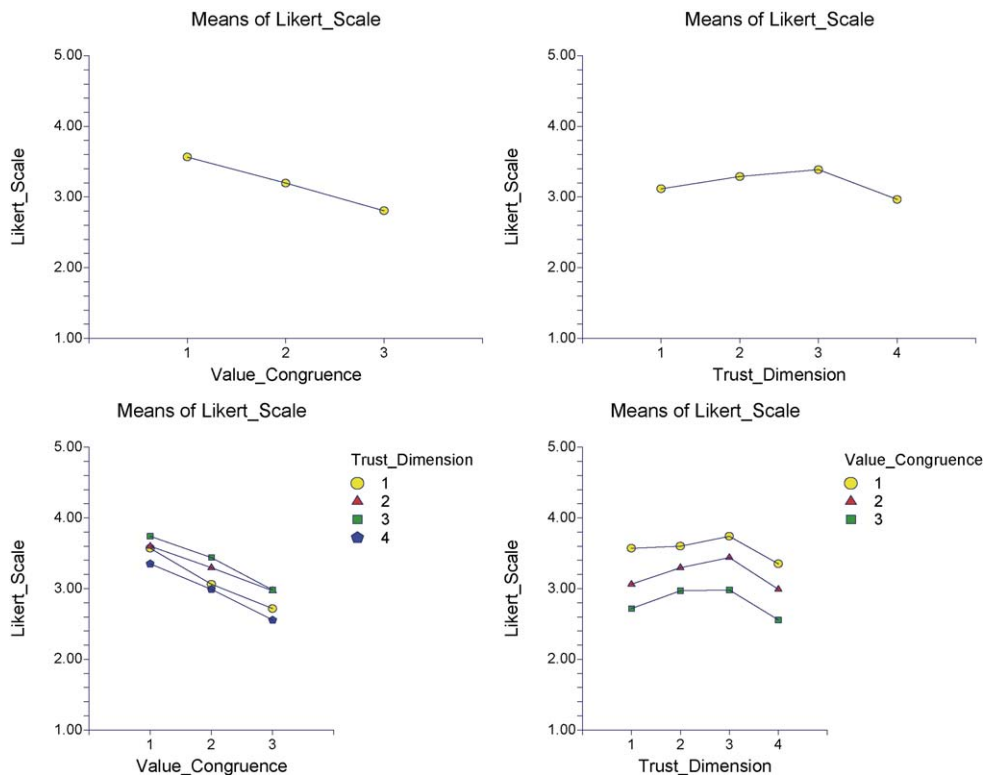

Fig. 1. Plots of mean values; value congruence: (1) compatible, (2) neutral, (3) incompatible; trust dimension: (1) benevolence, (2) ability, (3) integrity, (4) overall.

became used to transacting business online, this ability turned into a necessary but not sufficient condition for e-commerce and it no longer provides a competitive advantage. Our study suggests that one way to attract new customers is to create a perception of value congruence.

Also, it may be even more crucial to spend resources in avoiding conflicts with customers. It is easier to lose a good reputation than to build one. The accounting firm Arthur Andersen used to be a highly trusted company in the U.S., but its reputation was destroyed by the Enron scandal to the extent that the company no longer exists. Currently, companies are spending close to a billion dollars a year on cause-related marketing [1] and still more on other image-building activities. A dramatic increase has been reported in the number of corporate ethics officers who train employees, demonstrating a growing concern to avoid a bad public image [40].

It is worth noting, however, that having an intentional conflict with a certain group may actually gain publicity that leads to greater recognition and possibly higher sales from another group. For example, Abercrombie & Fitch, a clothing retail store that has a very explicit and suggestive catalog, has had many parents and conservative groups protest against its advertisements [12]. This conflict has attracted many teenagers and young adults to purchase its products, and has resulted in an overall increase in its sales [13].

6. Limitations

We tested the theory that perceived value congruence would affect an individual's trust in an e-business. This was done by presenting a hypothetical website that was said to be compatible with the subjects' values, but it would be better to use real websites and measure their level of value congruence.

Both hypotheses were supported in our study, suggesting that value congruence has a positive effect on trust and value conflict has a negative effect on trust. However, it may require much more effort to trigger a positive effect than a negative one, since it is much easier to lose a good reputation than to build one. Also, value congruence is a continuum rather that three disjoint sets. In our study, only three states of value similarity were measured since we wanted to examine these extremes on the continuum as a starting point.

It is unclear what impact value congruence has on the bottom line of a company. Past research has shown that trust enables price premiums, information disclosure, online purchases, etc., and studies have confirmed the positive association between online trust and purchases.

It would be insightful to examine such impacts for value congruence.

Previous studies on trust in e-commerce have confirmed that trust is a mediating variable. For example, in a B2C context, an individual's familiarity with an online firm has a direct effect on an individual's willingness to transact and an indirect effect that is mediated by trust. Similarly, institution-based trust has both a direct effect on trusting intentions and an indirect effect that is mediated by trusting beliefs. It seems likely that value congruence has both direct and indirect effects on dependent variables, such as willingness to purchase, brand loyalty, price premiums, and information disclosure, with the indirect effects being mediated by trust.

7. Conclusions

Our findings suggest that value congruence is an important tool for e-businesses to differentiate themselves. We demonstrated that value congruence helps build trust and value conflict reduces trust. As competition turns intense, it becomes more important for companies to distinguish themselves from the competition. Value congruence can be an effective tool for increasing trust to achieve this. For traditional business, the four P's of marketing are price, product, promotion and place. For e-businesses, place becomes irrelevant. However, the perception of value congruence may be an important marketing tool in helping to provide competitive advantages for e-businesses.

As competition and commoditization make it more difficult to compete on price, product and promotion, value congruence may offer the opportunity for organizations to establish a long-term competitive advantage in e-commerce.

References

[1] Advertising Age, Cause Marketing: After Two Decades of Growth, The $1 Billion Spending Mark is in Sight, Advertising Age, Chicago, 2003, p. 2.
[2] L.M. Anderson, R.L. Taylor, McCarthy's 4 Ps: timeworn or time-tested? Journal of Marketing Theory and Practice 3, 1995, pp. 1–9.

[3] S.H. Ang, S.M. Leong, G.P.S. Teo, The effects of personal value similarity on business negotiations, Industrial Marketing Management 29, 2000, pp. 397–410.

[4] S.L. Ba, P.A. Pavlou, Evidence of the effect of trust building technology in electronic markets: price premiums and buyer behavior, MIS Quarterly 26(3), 2002, pp. 243–268.

[5] A. Bhattacherjee, Individual trust in online firms: scale development and initial test, Journal of Management Information Systems 19(1), 2002, pp. 213–243.

[6] A. Borrus, To catch an identity thief, BusinessWeek 2003, p. 91.

[7] E. Brynjolfsson, M.D. Smith, Frictionless commerce? a comparison of Internet and conventional retailers Management Science 46(4), 2000, pp. 563–585.

[8] J.A. Cazier, B.B.M. Shao, R. St. Louis, Addressing e-business privacy concerns: the roles of trust and value compatibility, in: Proceedings of the 18th ACM Symposium on Applied Computing, Melbourne, FL, March 9–12, 2003.

[9] S. Chow, R. Holden, Toward an understanding of loyalty: the moderating role of trust, Journal of Managerial Issues 9(3), 1997, pp. 275–299.

[10] CNN.com, Latest ID Theft Scam: Fake Job Listings, CNN.com, 2003.

[11] D. Elizur, A. Sagie, Facets of personal values: a structural analysis of life and work values, Applied Psychology 48(1), 1999, pp. 73–87.

[12] Foxnews.com, Abercrombie & Fitch Blasted for Marketing Thongs for Children, Foxnews.com, 2002.

[13] Foxnews.com, Retailers Hope Sex, Discounts Drive Sales, Foxnews.com, 2002.

[14] C.L. Hartman, C.L. Beck-Dudley, Marketing strategies and the search for virtue: a case analysis of the Body Shop International, Journal of Business Ethics 20, 1999, pp. 249–263.

[15] H. Huang, C. Keser, J. Leland, J. Shachat, Trust, the Internet, and the digital divide, IBM Systems Journal 42, 2003, pp. 507–518.

[16] S.L. Jarvenpaa, N. Tractinsky, M. Vitale, Consumer trust in an Internet store, Information Technology and Management 1, 2000, pp. 45–71.

[17] Anon., Many have 'faith' in investing, Journal of Financial Planning 14(11), 2001, p. 24.

[18] D.I. Jung, B.J. Avolio, Opening the black box: an experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership, Journal of Organizational Behavior 21, 2000, pp. 949–964.

[19] S.E. Kaplan, R.J. Nieschwietz, A web assurance services model of trust for B2C e-commerce, International Journal of Accounting Information Systems 4, 2003, pp. 95–114.

[20] M. Koufaris, W. Hampton-Sosa, The development of initial trust in an online company by new customers, Information and Management 41, 2004, pp. 377–397.

[21] C. Liu, K.P. Arnett, Exploring the factors associated with web site success in the context of electronic commerce, Information and Management 38, 2000, pp. 23–33.

[22] X. Luo, Trust production and privacy concerns on the Internet: a framework based on relationship marketing and social exchange theory, Industrial Marketing Management 31(2), 2002, pp. 111–118.

[23] R.C. Mayer, J.H. Davis, F.D. Schoorman, An integrative model of organizational trust, Academy of Management Review 30(3), 1995, pp. 709–734.

[24] D.J. McAllister, Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations, Academy of Management Journal 38(1), 1995, pp. 24–59.

[25] D.H. McKnight, V. Choudhury, C. Kacmar, Developing and validating trust measures for e-commerce: an integrative typology, Information Systems Research 13(3), 2002, pp. 334–359.

[26] Mori Market and Public Opinion Agency, Consumers expect business to achieve social as well as economic goals: new study pinpoints what consumers want from corporation, September 30, 1999.

[27] E.W.T. Ngai, F.K.T. Wat, A literature review and classification of electronic commerce research, Information and Management 39, 2002, pp. 415–429.

[28] J. Neter, W. Wasserman, M.H. Kutner, Applied Linear Statistical Models, Irwin, Homewood, IL, 1985.

[29] New Webster's Dictionary, Lexicon Publications, Danbury, CT, 1993.

[30] J.A. Quelch, L.R. Klein, The Internet and international marketing, Sloan Management Review 37(3), 1996, pp. 60–76.

[31] J.E. Scott, Facilitating inter-organizational learning with information technology, Journal of Management Information Systems 17(2), 2000, pp. 81–113.

[32] M. Siegrist, G. Svetkovich, C. Roth, Salient value similarity, social trust, and risk/benefit perception, Risk Analysis 20(3), 2000, pp. 353–362.

[33] M. Sillanpaa, The Body Shop values report: toward integrated stakeholder auditing, Journal of Business Ethics 17, 1998, pp. 1443–1456.

[34] C.N. Smith, Corporate social responsibility: whether or how? California Management Review 45(4), 2003, pp. 52–76.

[35] SocialFunds.com, Statistics and Trends on Socially Responsible Investing, SocialFund.com, 2003.

[36] D.L. Spar, L.T. La Mure, The power of activism: assessing the impact of NGOs on global business, California Management Review 45(3), 2003, pp. 78–101.

[37] R.P. Srivastava, T.J. Mock, Evidential reasoning for web trust assurance services, Journal of Management Information Systems 16(3), 2000, pp. 11–32.

[38] M. Statman, Socially responsible mutual funds, Association for Investment Management and Research, 2000.

[39] R. Sullivan, The darkest side of ID theft: when imposters are arrested, victims get criminal records, MSNBC News, 2003.

[40] N. Swartz, Rise of the corporate ethics officer, Information Management Journal 37(1), 2003.

[41] E. Vitagliano, Why the Disney boycott shouldn't go away: company policies, practices, products still call for activist response, AFA Journal 2001, pp. 4–7.

[42] S.G. Wilson, I. Abel, So you want to get involved in E-commerce, Industrial Marketing Management 31(2), 2002, pp. 85–94.

[43] L.G. Zucker, Production of trust: institutional sources of economic structure 1840–1920, Research in Organization Behavior 8, 1986, pp. 53–111.

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