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ABSTRACT

With the advent of the internet and rise of less personal, face to face interaction in online commerce, as well as increasing reports of fraud and security breaches, trust has become a critical part of conducting business in the digital economy. This paper develops a framework and model for understanding and building trust by combining some landmark research on the creation and production of trust with the dimensions of trust identified in the literature: ability, benevolence and integrity. By combining these dimensions in a matrix with the types of trust production based on characteristics, process and institutions, the paper develops a robust 3 x 3 matrix which to categorize and understand trust production and sources of trust. This framework can help researchers, practitioners and consumers understand trust creation and assist businesses in developing a comprehensive strategy for managing trust.

Keywords

Trust, framework, business models, digital economy.

INTRODUCTION

Trust is the cornerstone of the digital economy, and the lubricant that makes efficient markets possible. Without trust, few transactions would take place. Consumers will not buy from a seller if they do not trust the seller to deliver the product as agreed. Businesses will not trade if they do not trust the other party to follow through with its promises. Clients also may refuse to do business if they do not trust the security and privacy practices of the vendor. Lack of trust can lead to costly legal protections, inefficient contracts, lost sales, and business failure.

While trust is important for all types of business, trust is even more crucial in the online business environment. In the brick and mortar world, customers can alleviate some of their concerns through face-to-face interactions with a representative from the business. The physical presence of the business also offers assurance that it exists, is accessible, and can be trustworthy. In the online virtual marketplace, it is difficult (if not impossible) to develop trust from the visible presence of the business and personal interaction with its people.

Trust has been identified by prior studies as a critical success factor for online businesses. It is imperative for organizations and researchers to study how online consumer trust is promoted and cultivated (Koufaris and Hampton-Sosa, 2004). Luo (2002) argued that the lack of online trust is one of the main reasons people drop out of online business transactions. Without a sufficient level of trust, many customers are unwilling to engage in e-commerce. Brynjolfsson and Smith (2000) found that online retailers who offer the lowest prices do not necessarily register the highest sales for those products. They argued that this result is partially due to differences in the levels of trust in these online sellers. As a result, some Internet businesses have to lower their prices in order to compensate for a lower level of consumer trust, a practice that may hurt their long-term profitability and sustainability. By the same token, Ba and Pavlou (2002) found that high levels of trust enable vendors to charge price premiums.

Quelch and Klein (1996) 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, sales and profits, which are crucial for the survival and prosperity of an online business. At an international level, Huang et al. (2003) found that trust is an important factor in determining the Internet's penetration and usage across countries.

Clearly trust is an important part of any business, especially digital business, and the study and understanding of trust can be a useful part of building IS theory and advancing the diffusion of Internet technology. This paper develops a framework for understanding the production and use of trust and how it can be applied to business settings.

LITERATURE REVIEW

Zucker and Trust Creation

Trust is defined as the willingness of a party 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).

Zucker (1986) did an analysis of the production of trust, and the factors in society that can affect the nature and amount of trust. She found that trust grew out of several different processes that could affect a trustor's trust in a trustee.

Process-based trust is created through a process of social exchange and experience between organizations and customers. 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 (Lou 2002). For example, if a consumer has done business with an organization in the past, and been satisfied, they are more likely to trust that it will go well in the future and have a higher level of trust (or distrust if it went poorly).

Institution-based trust is created through a third party. This can be a government agency, a bank, or some other organization that assures the trustworthiness of the target organization. Srivastava and Mock (2000) discussed this type of trust production with the American Institute of Certified Public Accountants' (AICPA) WebTrust Assurance Program. By having a qualified third party audit and approve the practices of a website, consumers are generally more willing to trust and do business with that site. Institution based trust is almost like a transfer of trust and has two types, the person/firm level and the intermediary level. In the person or firm level they might trust because someone has a degree or other credential like a medical license or CPA from an institution they recognize. In the intermediary variant they might trust the organization because of a level of trust they have in an organization like a bank or regulatory agency.

Characteristic-based trust is created through a sense of shared communality with the other party. This can be similar values, background, ethnicity, or experience. Trust is increased by having something in common or by possessing a characteristic the trustor finds desirable. For instance, it is found that the greater the extent of the cultural similarities, the greater the level of trust in the transacting partners (Lou, 2002). Trust is tied to the organization because of something that the organization possesses or something for which it stands. For example one may have trust in another because of a shared ethnic or cultural background, shared social or religious values or familial ties.

These methods of trust production can be very important to academics and professionals as they try to understand and improve trust in the digital economy.

Mayer, Davis and Schoorman and the Dimensions of Trust

Mayer et al (1995) developed a model for the dimensions trust. These include the trustor's perception of the trustees ability, benevolence and integrity. An important consideration is that trust is not a uni-dimensional construct. McKnight et al. (2002) showed that trust is a multi-dimensional construct. They found people hold specific beliefs with respect to particular attributes (ability or competence, benevolence, and integrity), rather than being just trusting or not trusting.

Ability, 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 the "trustor's perception that the trustee would adhere to a set of principles that the trustor finds acceptable." It is not just that they have principles, but the principles are ones that are acceptable. For example if the trustee's values are to lie steal and cheat every time they have a chance, this would not increase trust.

FRAMEWORK DEVELOPMENT

These two views of trust can be combined into a framework in which research in trust and way to increase it can be categorized into one or more of the squares in the 3x3 matrix below.

Trust Dimension	*Process-Based Trust*	*Institutional-Based Trust*	*Characteristic-Based Trust*
Ability	Process/Ability	Institution/Ability	Characteristic/Ability
Benevolence	Process/Benevolence	Institutional/ Benevolence	Characteristic/Benevolence
Integrity	Process/Integrity	Institutional/Integrity	Characteristic/Integrity

Table 1. Trust Creation and Dimension Framework

Combining the matrix in this way, shows the impact of the method of trust production on each dimension of trust, this is important because the properties of each dimension of trust and the method of production may be different in customer impacts, as well as have differences in stability, degree and choice. Note that these matrix cells are not mutually exclusive, it is possible, even likely, for an organization to appeal to customers from multiple cells.

In the Process/Ability cell an individual's trust is affected on the ability dimension by the process of social exchange by interacting with an organization over time. As predicted by social exchange theory, the more positive interactions the customer has regarding the ability of the firm to fulfill its obligations to the customer, the greater the level of trust for this cell. Likewise negative interactions would reduce the level of trust in this cell. If an organization feels that customers have a weak perception of their ability, they may choose to focus on building or restoring trust in this cell with a process focusing on their ability to deliver the best product or service.

For the Institutional/Ability cell trust is produced with the interaction of a third party that vouches for the ability of the firm or individual providing the good or service. A business they can have trust built (or destroyed) from a third party, such as the media or an organization like consumer reports that rate or give information on products or services.

For the Characteristics/Ability cell, trust in the ability dimension is affected by the perceived characteristics of the firm. This is trust in the ability which is influenced by the nature of the firm or individual providing the good or service. For example, if the Japanese have a reputation for making quality electronic products, the fact that a product is made by a Japanese firm may increase a consumers trust in the ability of that organization to make a quality product, increasing the likelihood of purchase.

In the Process/Benevolence cell trust and goodwill are created over time as the individual observes that the organization appears to care about the best interest of the customer, beyond a strict profit motive. This usually happens when the firm goes above and beyond the call of duty with a customer and exceeds their expectations, or when they have an opportunity to take advantage of a customer but instead put the customer first. By focusing on the long-term value of the customer and giving them value, business can build trust on the benevolence dimension through this process.

For the Institutional/Benevolence cell, trust is created by the audit or endorsement of a third party institution as to the goodwill that an organization has for them. This can be created by something like a rating system like that found on companies like eBay where there is a rating system for the customer service that rates how well they were treated by seller and if they tried to take advantage of the customers or not.

With the Characteristic/Benevolence cell, trust is based on the perceived characteristics of the firm. For example if they are based on a certain religious persuasion (i.e. sell religious books), trust can be created in those that have respect for and trust in those values, likewise with social causes.

In the Process/Integrity cell trust s produced by observing over time that the organization acts with integrity and repeatedly does what it promises.

In the Institutional/Integrity cell, another organization, such as the eTrust certifies that the organization does what it says it will do with regards to certain aspects of its business, such as it following and obeying its privacy policy.

With the Characteristic/Integrity cell, trust is created on the integrity dimension based on the characteristics of the firm. For example if it is a company or organization that is believed to have a certain code, based on the ethnic, religious or cultural background of the firm, the individual may have greater trust in them based on their perception of this group.

While this all discusses trust creation, it is likely that trust can also be destroyed in each of the cells based on the matrix.

CONCLUSION

This framework and model can be used to understand the creation and sources of trust and give organization a way to categorize trust based on its dimension and means of creation. Using this tool they can see where they may be weak in certain areas and can develop a trust management strategy to build trust where it is needed to hopefully lead to a competitive advantage.

While this work makes an important contribution by developing this model and framework, future research should explore how this model can be used; develop scales for measuring the trust in each of the cells to more accurately understand where an organization is and how they can improve trust. This would make this model more useful to businesses in the digital economy and assist them with trust management efforts.

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