

FACTORS AFFECTING TRUST IN SUPPLY CHAIN COMMITMENT

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ABSTRACT

Trust is one of the most important aspects in successful supply chain relationship that encourages commitment in the relationship. A supply chain relationship which lacks of trust and commitment may affect the performance of partners which in turn results in high-cost or even loss of current suppliers or customers. This research's objective is to measure the factors that affect level of trust and the impact of trust on supply chain commitment in Electronic Distribution business in Bangladesh. To measure the factors affecting trust and the impact of trust on commitment, items were adapted from the study conducted by Kwon and Suh (2004). Data were collected from 54 managers, branch managers and managing directors of electronic distribution business in Chattogram. Convenience sampling technique was used to select respondents. The results indicate that a firm's trust in its supply chain partner is highly associated partner's specific asset investments (positively) and behavioral uncertainty (negatively). It is also found that information sharing reduces the level of behavioral uncertainty, which, in turn, improves the level of trust. A partner's reputation in the market has a positive impact on the trust-building process, whereas a partner's perceived conflict creates a negative impact on trust. Finally, the level of commitment is strongly related to the level of trust. Managerial implications, limitations and further research directions are also discussed.

Keywords: Trust, commitment, partner's asset specificity, behavioral uncertainty, perceived satisfaction, information sharing, partner's reputation, perceived conflict

บทคัดย่อ

ความไว้วางใจถือเป็นหนึ่งในปัจจัยที่สำคัญที่สุดของการบริหารความสัมพันธ์ในโซ่อุปทานที่ประสบความสำเร็จ ซึ่งกระตุ้นให้เกิดข้อผูกพันในความสัมพันธ์นั้น ความสัมพันธ์ในโซ่อุปทานที่ขาดความไว้วางใจและข้อผูกพันในความสัมพันธ์อาจส่งผลกระทบต่อผลประกอบการของกลุ่ม ทำให้ต้นทุนสูงหรือสูญเสียพลาซเออร์หรือลูกค้าไป งานวิจัยนี้มีวัตถุประสงค์เพื่อวัดปัจจัยที่ส่งผลต่อความไว้วางใจ และผลกระทบของความไว้วางใจต่อข้อผูกพันในโซ่อุปทานในธุรกิจกระจายสินค้าอิเล็กทรอนิกส์ในประเทศบังกลาเทศ มีการเก็บข้อมูลจากผู้จัดการ ผู้จัดการสาขาและกรรมการผู้จัดการในเมืองจิตตะกอง โดยการสุ่มตามความสะดวก ผลวิจัยแสดงให้เห็นว่าความเชื่อมั่นของบริษัทต่อคู่ค้าในโซ่อุปทานมีความสัมพันธ์ในเชิงบวกกับการลงทุนในสินทรัพย์เฉพาะ และเชิงลบต่อความไม่แน่นอนในพฤติกรรม นอกจากนี้ยังพบว่า

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การแบ่งปันข้อมูลช่วยลดระดับความไม่แน่นอนในพฤติกรรม ในทางกลับกันก็เพิ่มระดับความไว้วางใจขึ้น ทั้งนี้ชื่อเสียงของคู่ค้าในตลาดส่งผลเชิงบวกต่อกระบวนการสร้างความไว้วางใจ ในขณะที่สิ่งที่คู่ค้ามองว่าเป็นความขัดแย้งก่อให้เกิดผลเชิงลบต่อระดับความไว้วางใจ นักวิจัยยังพบว่าระดับของข้อมูลคู่ค้ามีความสัมพันธ์อย่างยิ่งต่อระดับความไว้วางใจ

คำสำคัญ: ความไว้วางใจ ข้อมูลคู่ค้า การลงทุนในสินทรัพย์เฉพาะ ความไม่แน่นอนในพฤติกรรม ความพึงพอใจ การแบ่งปันข้อมูล ชื่อเสียงของคู่ค้า ความขัดแย้ง

INTRODUCTION

The success of a supply chain management depends on the trust among the supply chain partners and the commitment between them (Zhang & Huo 2013). A major share of strategic alignment does not become effective and successful only because of the shortage of trust between the employees (Kwon & Suh, 2004). Authors found that trust induces success of a relationship, stability and performance in supply chain partnership (Handfield & Bechtel, 2002; Nyaga, Whipple, & Lynch, 2010). Lack of trust among the trading partners in an organization often creates a suspected situation where each transaction needs to check and recheck. Absence of credibility and trust consequence the unnecessary increase of transaction cost. So building trust among the trading partner becomes a crucial part of the supply chain managers in an organization.

Again commitment is another equally important factor of supply chain management. The commitment toward partners is significantly related to the trust in an organization (Kumar, Scheer, & Steenkamp, 1995). Commitment to ongoing relationships among supply chain members helps to increase efficiency and effectiveness (Johnston, McCutcheon, Stuart, & Kerwood, 2004; Vijayasathy, 2010). The combination of commitment and trust among the partners jointly produce the efficiency, productivity and effectiveness (De Ruyter, Moorman, & Lemmink 2001). Productive supply chain collaboration can be established by the relation based on the trust and commitment between the suppliers and the customers (Gounaris & Venetis, 2002). Morgan and Hunt (1994) also said that commitment and trust has a vital role to play to endorse productivity, efficiency and positive outcomes. (Kwon & Suh 2004) again agree with the statement that a successful supply chain management stands on the foot of high level if there is trust and commitment among the partners of the supply chain partners. Therefore, many researchers conducted several studies to examine the factors that affect the level of trust and commitment in supply chain relationship.

Electric goods business in Bangladesh is one of the fastest growing businesses in the country with great potential. The market size of the electric goods industry (including both industrial and consumer electric) was around 4 billion USD in 2017 and is expected to reach around 12 billion USD by 2025. The sector has been growing at the rate of 15 per cent. In a recent survey, conducted by BUILD, it was seen that in the electronic home appliance's assembling and manufacturing sector, around BDT 5.0 billion has been invested -- thereby employing more than 10,000 people. Popular Bangladeshi electric brands include Walton, Jamuna Electronics, Singer, Marcel, Eco Plus, Vicon, Vision, Vigo, My One, Minister, Butterfly &

LG, Swan etc. Television, refrigerators and air conditioners are the major products (Electronics industry, 2020).

Trust becomes one of the most critical factors for committed and collaborative relationships in electronic distribution business supply chain. If trust is present, it can improve the chances of a successful supply chain relationship; if not, transaction costs can rise through poor performance and bullwhip effect can increase through poor information sharing. It is apparent that trust only exists when both parties think it exists that information needs to be shared freely, and that partners need to follow through with promises made.

Many researchers conducted several studies to examine the factors that affect the level of trust and commitment in supply chain relationship in different context in different countries, such as Taiwan's automotive industry (Wang, 2008), Canadian energy sector (Chen, Yen, Rajkumar, & Tomochko, 2011), Bangkok's Tops supermarket (Saisomboon, 2008), Swedish wood industry (Zineldin & Jonson, 2000), US Midwest region's automobile (Kwon & Suh, 2004) and so on. However, so far to the knowledge of the researchers such study was neither conducted in Bangladesh nor applied in electric home appliance distribution business in any other country. Hence the study attempts to fill this gap.

Research Objectives

The main objective of this research was to identify the impact of trust on commitment to supply chain partners in electric distribution business in Bangladesh. This overall main objective is therefore can be subdivided into the following specific objectives.

1. To accumulate the factors constitute trust among supply chain partners.
2. To measure the existing level of trust and commitment among the supply chain partners in electric home appliance distribution business in Bangladesh.
3. To investigate the impact of trust on supply chain members' commitment of electric home appliance distribution business in Bangladesh.

LITERATURE REVIEW AND THEORETICAL DISCUSSION

Trust

Trust can simply be defined as the willingness to rely on a trading partner (Moorman, Deshpande, & Zaltman, 1993). It enables a trading partner to believe the other partner who considered being reliable (Moorman & Miner, 1997; Laeequddin, Sahay, Sahay, & Waheed, 2010). Krishnan, Bhadra, & Bhadra (2006) argued that trust is a factor which has a direct contribution to the success of strategic alignment. Trust results in a belief that a partner company will perform actions that will result in positive outcomes for the firm, as well as that the partner company will not take unexpected risks that result in negative outcomes (Anderson & Narus, 1990). Trust between the trading partners reduce the opportunistic behavior tendency and also reduce the fear of unexpected information share (Li & Lin 2006), stimulate internal information flow and encourage to believe the content of received information. All the dimension and sub-dimension of trust suggest that trust has a direct positive impact on transactional cost. Scholars also suggested that trust has important effects that reduce the transactional cost (Chiles & McMackin 1996; Noorderhaven 1996).

Managers have to spend considerable time and energy to the low trust relationship than a high trust relationship.

The existing level of trust among supply chain partners can therefore be measured from the benefits of high trust relationships and also from the drawbacks of lack of trust relationships. Both benefits and drawbacks can be related to the partners' transaction cost or can be related to their interpersonal / inter-organizational relationships. Kwon and Suh (2004) used two types of constructs (Transaction Cost Variables and Social Exchange Variables) for measuring level of trust while measuring relationship between trust and commitment among supply chain practicing companies listed in APICS, ASQ, CLM, and ISM. They mentioned that those constructs were picked from the work of Joshi and Stump (1999) and Morgan and Hunt (1994).

Factors affecting Trust

To identify the factors that affect the trust and then its impact on commitment in electric home appliance distribution business of Bangladesh, in this study, the researchers planned to use those two popular theories - transactional cost analysis (Hobbs 1996; Williamson 2008), social exchange theory (Joshi & Stump 1999; Griffith, Harvey et al. 2006), and Morgan Hunt's framework (Morgan & Hunt 1994). Factors collected from transactional costs are asset specificity, behavioral uncertainty, and information sharing and the factors collected from social exchange theory are perceived satisfaction, perceived reputation and perceived personal conflict.

Asset specificity: Asset specificity defines the extent of assets dedicated to sustain a given interrelationship (Erramilli & Rao 1993; Heide 1994; Williamson, 1985). These assets can be anything such as human capital or physical assets that help for transaction or continuing relationship (Shelanski & Klein 1995). For the electronic business it means the more non-re-deployable internal assets specified for the producer by a dealer, the more risk he bears and the more mistrust dealer grows for the producer due to safeguard of the assets. These types of assets have been defined as Respondent Assets Specificity (RAS) and they suppose to have negative relationship with trust. The other types are the external assets dedicated by the producer for the dealer named as The Partner's Asset Specificity (PAS), increases the level of trust of the dealer (Kwon & Suh, 2004). Weiss and Anderson (1992) found that a partner's asset specificity reduces dissatisfaction between trading partners and also positively related to commitment (Anderson & Weitz 1992; Heide & John 1990).

Partner's Behavioral Uncertainty: Behavioral uncertainty is defined as "the inability to predict a partner's behavior or changes in the external environment" (Joshi & Stump 1999). According to Williamson (1985), behavioral uncertainties arise when a firm cannot oversee the activities of trading partners. Therefore, behavioral uncertainty develops confusion over proper compliance with contracts between partners and subsequently increases the transaction costs (Alchian & Demsetz 1972). The lower the behavioral uncertainty, the higher the level of trust among supply chain partners (Kwon & Suh, 2004).

Information Sharing: Fruitful supply chain relationship requires sharing demand and supply information, new product information along with sometimes critical cost and financial information. Such sharing makes transaction easier, efficient and effective,

ultimately improves opportunity to build trust and reduces transaction cost (Henderson, 2002). Kwon and Suh (2004) also agreed that Information sharing lowers the degree of behavioral uncertainty indirectly and improves the level of trust among supply chain partners.

Perceived Satisfaction: Perceived satisfaction refers to the level of satisfaction achieved in working with the partner (Kwon & Suh, 2004). If there is an understanding that partnerships produce mutually satisfactory outcomes that they can share, the level of trust increased (Batt 2003).

Partner’s Reputation: It is the goodwill of the partner in the market. Kwon and Suh (2004) has proven that supply chain partners who possess a high and credible reputation in a market he is more trustworthy in relationships.

Perceived Personal Conflict: Personal conflict arises from the perception that one person may negatively react to the behavior of another person. It may results disagreement among partners on specific issues while dealing in the business. If channel partners perceive personal conflicts, it negatively affects the trust-building process (Kwon & Suh, 2004).

Commitment

Commitment refers to the belief of a partner that an ongoing relationship with another partner is so important that it warrants maximum efforts to maintaining it (Morgan & Hunt 1994). A commitment between trading partners refers to the willingness of buyers and suppliers to exert effort on behalf of the relationship (Monczka, Petersen, Handfield, & Ragatz, 1998). It stimulates the long-term success of the partners of the supply chain (Bratton, Mentzer, Foggin, Quinn, & Golicic, 2000).

Factors affecting Commitment

Wu, Chiag, Wu, and Tu (2004) concluded in their study on “the influencing factors of commitment and business integration on supply chain management” that, the level of idiosyncratic investments to supply chain partners, the degree of dependence between supply chain partners, and the level of product scalability of manufacturer, the degree of trust, power, continuity, and communication between supply chain partners influences commitment. They measured these factors by the following measures.

Table 1: Factors Measure Commitment (Indicators/Metrics)

Factors	Measures
Idiosyncratic investments	Investment in product line, investment in selling product, investment in developing business.
Degree of dependence	Manufacturing ability, development of new product, marketing ability, financial support, human resource support.
Product scalability	Technical advancement, quality, value, usefulness, service level provided.
Trust	Honesty and truthfulness, integrity and willingness of sharing information about new development.
Power	Ability to readjust price strategy, ability to readjust product and training support.
Continuity	Degree of dealing, length of relationship.
Communication	Marketing and planning efforts, marketing analysis, strength.

Kwon and Suh (2004), on the other hand, measured commitment level by asking question on belongingness, positive feeling, and enjoyment on working together.

Relationships between Trust and Commitment

Successful supply chain relationship requires commitment among the supply chain partners, and trust is a critical element to sustain such commitment (Kwon & Suh, 2004). McDonald (1981) commented that mistrust reduces commitment in the relationship. Trust is considered very important even if the cornerstone for strategic partnership (Spekman, 1988). Similar positive relationship was found by other researchers too (Morgan & Hunt, 1994; Dyer, 1996). However, unless trust cannot be translated into actionable commitment, benefit would be achieved from supply chain relationship.

Hypothesis Development and Research Framework

Following research hypotheses were drawn from the previous literature review and theoretical discussion.

Hypothesis H₁: There is a positive relationship between asset specificity (PAS) for the supply chain partners (for the distributor/dealer by the producer/importer) and the level of trust in electric products distribution supply chain in Bangladesh.

Hypothesis H₂: There is a negative relationship between asset specificity (RAS) for the supply chain partners (for the producer/importer by the distributor/dealer) and the level of trust in electric products distribution supply chain in Bangladesh.

Hypothesis H₃: There is a negative relationship between the perceived behavioral uncertainty and the level of trust in electric products distribution supply chain in Bangladesh.

Hypothesis H₄: Information Sharing indirectly improve level of trust in electric products distribution supply chain in Bangladesh.

Hypothesis H₅: There is a positive relationship between the level of perceived satisfaction and the level of trust in electric products distribution supply chain in Bangladesh.

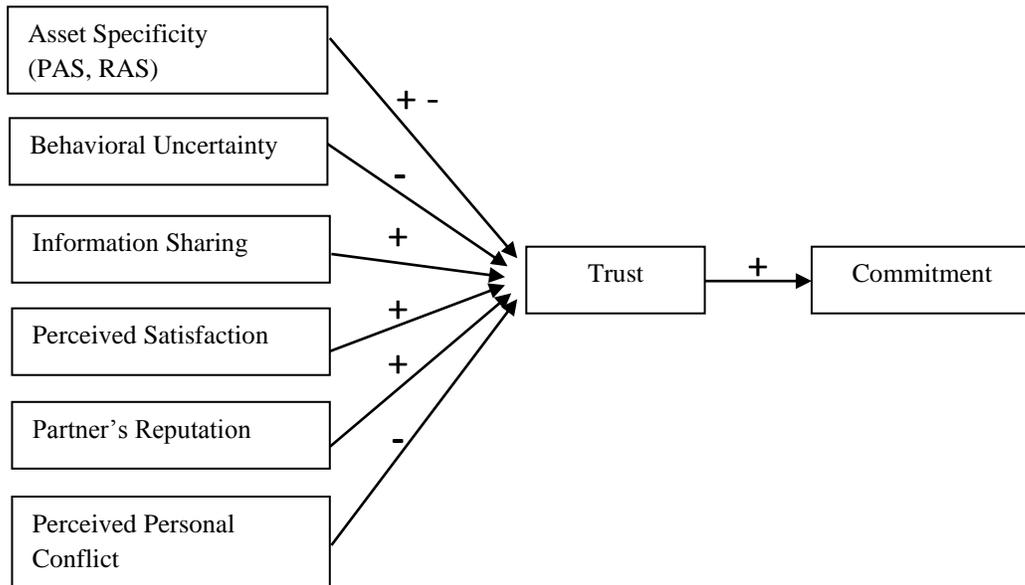
Hypothesis H₆: There is a positive relationship between a partner's reputation in the market and the level of trust in electric products distribution supply chain in Bangladesh.

Hypothesis H₇: There is a negative relationship between the perceived personal conflict and the level of trust among partners in electric products distribution supply chain in Bangladesh.

Hypothesis H₈: There is a positive relationship between the level of trust and the level of commitment among partners in electric products distribution supply chain in Bangladesh.

The following figure summarizes the relationship between various factors and trust, and between trust and commitment that will be test for the electronic distribution business of Bangladesh.

Figure 1: Research Framework



Source: Adapted and modified from Kwon and Suh (2004)

RESEARCH METHODOLOGY

This research paper is descriptive. The Primary data was collected from electric distribution showrooms located in Chattogram through the structured questionnaire. Secondary data was collected from different published documents such as journal papers, books etc. that have been referred at the end of the paper. Sample numbers were determined using Cockhran's (1977) proportion formula due to categorical variables. After considering finite population trade out of 8790 populations (The Financial Express, 2018; Singer Bangladesh Limited, 2020; Naznin, 2016; Rangs Electronics Ltd., 2020; Philips adds four new distributors, 2016; Esquire Electronics Ltd., 2020; Butterfly Marketing Ltd., 2014; LG Electronics, 2020; Advanced Chemical Industries Limited, 2020; Best Electronics, 2020; Transcom Digital, 2020) the resulted required number of samples becomes 369.

Participants

Respondents for this study were managers, branch managers and managing director of electric goods showrooms /sales centers (Home Appliance, Television, Air Conditioners, Refrigerator and others). Respondents' reserved and very busy mentality limited the number of questionnaire possible to distribute. 72 questionnaires were possible to distribute among operations managers, branch managers, and managing director of electronic distribution business in Chattogram. Out of 72, 54 (75%) were responded appropriately. Hence, the sample size for this study was 54. Convenience method was used for selecting electronic showrooms for easy accessibility.

Survey Instruments

This study used the questionnaire developed by Kwon and Suh (2004) but in different context and country. The indicators were measured using a seven-point Likert scale from where 1 denoted "strongly agree" and 7 denoted "strongly disagree".

Table 2: Number of Items to Measure Variables

Variables/ Indicators	Number of items
Trust	10
Commitment	3
Partner's Asset Specificity	6
Behavioral Uncertainty	2
Perceive Satisfaction	3
Information Sharing	2
Partner's Reputation	3
Perceived Personal Conflict	2

Data Collection and Analysis Procedure

In order to collect data, printed questionnaires were employed. Respondents were asked to fill up the questionnaire. They were briefed about the purpose of the study through the cover letter along with the questionnaire. The respondent took 15 minutes on an average to complete the questionnaires.

On the basis of the answer provided by the respondents' average, standard division were used to measure the extent of the variables in electronic products distribution supply chain in Bangladesh. Then Pearson's correlation method and regression analysis were used to measure the factors association with level of trust and also the impact of trust on supply chain commitment.

Validity and Reliability of Scales

Questionnaire from previous similar literature already ensures validation. Therefore, only reliability was planned to be tested. After data collection Cronbach's alpha method was used to assess scale reliability with respect to verifying the consistencies of the items used in measuring the level of trust and commitment. Cronbach's alpha value ranges from 0 to 1, but satisfactory value is required to be more than 0.60 for the scale to be reliable (Cronbach, 1951; Malhotra, 2002).

Table 3: Reliability Statistics

Cronbach's Alpha	N of Items
0.778	31

Table 3 indicates that Cronbach's alpha of the items was 0.778 which is more than 0.60. Therefore, the items used in this study were reliable for the data collection.

Findings

At first, descriptive statistics of the variables have been presented to measure their existing level in electronic products distribution supply chain in Bangladesh. The mean and standard deviation of the variables and the percentile of the responses are given in Table 4.

The mean responses of both the dependent variables are below mid-point 3.5 (since 7-point Likert scale was used). This means that electric goods distributors, on average, somewhat trust their supplier-producer/importer. Their commitment levels to their suppliers are also better than neutral. Better commitment is understandable due to somewhat trust to the supplier. Later, their correlation will be used to reveal real picture.

Table 4: Descriptive Statistics

Variable	Mean	Std. Dev.	Strongly Disagree	Disagree	Some Disagree	Neutral	Some agree	Agree	Strongly Agree
Trust	3.122	0.7035	0%	0%	7%	7%	57%	28%	0%
Commitment	2.932	0.9634	0%	4%	6%	15%	13%	57%	6%
Partner's Asset Specificity	3.932	0.9097	2%	2%	26%	39%	19%	13%	0%
Respondent's Assets Specificity	2.494	0.6065	0%	0%	0%	6%	22%	61%	11%
Behavioral Uncertainty	4.898	1.1301	11%	37%	24%	9%	15%	4%	0%
Information Sharing	2.583	0.7508	0%	0%	6%	6%	17%	69%	4%
Perceived Satisfaction	4.056	0.6627	0%	9%	9%	69%	11%	2%	0%
Partner's Reputation	3.519	0.4563	0%	0%	2%	44%	52%	0%	2%
Perceived Personal Conflict	4.685	1.1627	2%	43%	24%	11%	15%	6%	0%

Note: Likert's 7-point scale was used for data collection where 1 denoted "strongly agree" and 7 denoted "strongly disagree."

Response percentiles also ensure that those mean is not the results of the extreme values. Respondent showroom/shop management really scored though not high but positively against trust (85% on agreement and 7% on disagreement) and commitment (76% on agreement and 10% on disagreement). Among the independent variables that were supposed to influence trust two expected positive factors – respondent's assets specificity (average 2.494 < 3.5) and information sharing (average 2.583 < 3.5) were showing high presence. This means the respondent stores/dealers agree that they commit resources for their supplier. Less agreement was found for another two expected positive factor partner's asset's specificity (3.932) and perceived satisfaction (4.056). Besides, respondents were neutral on the presence of partner's reputation (3.519). Among the two expected negative factors – behavioral uncertainty had questions commensurate to behavioral certainty and therefore resulted mean (4.898 – somewhat disagree) means some presence of behavioral uncertainty. The remaining negative factor perceived personal conflict was found having low presence (4.685). It is notable that 94% of the respondents agree that they specify assets for their partners whereas only 32% of them agree that their partners also specify assets for them.

Here 39% remain neutral that gives a hint that there is a doubt on the asset specification by the partner. 72% of the respondent agrees that behavioral uncertainty is an issue whereas 90% of the respondents confirm that information shared is an issue. High percentage in neutral for perceived satisfaction (69%) and partner's reputation (44%) tells that the respondents are not sure about those variables. Respondents confirmed that there exists insignificant amount of personal conflict between distributor's and producer's/importer's interest (69% in disagreement and neutral 11%).

Table 5: Correlation Matrix of Trust and the Independent Variables of Trust

	Trust	PAS	RAS	BU	IS	PS	PR
Partner's Assets Specificity (PAS)	.394**	1					
Respondent's Assets Specificity (RAS)	.182	.392**	1				
Behavioral Uncertainty (BU)	.080	-.105	-.260	1			
Information Sharing (IS)	-.221	-.047	.288*	-.390**	1		
Perceived Satisfaction (PS)	.761**	.281*	.170	.209	-.193	1	
Partner's Reputation (PR)	.371**	.288*	.004	-.042	-.073	.347*	1
Perceived Conflict (PPC)	-.419**	-.321*	-.105	.119	.139	-.397**	.088

Note: *. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed); N=54;

According to the theoretical there should be some kind of relationships between trust and its expected seven determinants. Table 5 presents correlation matrix to find such relationships. Table 5 revealed that partner's asset specificity ($r = 0.394^{**}$), perceived satisfaction ($r = 0.761^{**}$), and partner's reputation ($r = 0.371^{**}$) possess a significant positive correlation with trust, whereas perceived conflict ($r = -0.419^{**}$) possesses a significant negative correlation with trust. However, except perceived satisfaction other variables possess weak correlation. Besides, only one of the transaction cost related variables (Partner's Asset Specificity) where found correlated with trust proving alternative hypothesis H₁, and all three factors of the social exchange variables (Perceived Satisfaction, Partner's Reputation, and Perceived Personal Conflict) were found correlated proving alternative hypothesis H₅, H₆, H₇ are accepted. It was expected from the theory that information sharing indirectly (i.e. through behavioral uncertainty) affect trusted relationship. Subsequently, though a significantly negative relationship was found between information sharing ($r = -0.390^{**}$) and behavioral uncertainty but no significance relationship was found between behavioral uncertainty and trust. Therefore, both alternative hypotheses H₃ and H₄ has been failed to be proved. Last but not the least, 'Respondent's Asset Specificity' i.e. asset specified for the partner variable was not found significantly affecting trust and thus nullify alternative hypothesis H₂. Significant correlations between partner's asset specificity and the social variables confirms that if supply chain partner devote assets for facilitating transaction counter part's satisfaction enhances, partner's reputation in the market increases and interpersonal conflict reduces. Similarly, higher perceived satisfaction to a partner increases his reputation and decreases interpersonal conflict.

Table 6: Regression Analysis of Trust on Only Correlated Independent Variables

Variables		Un-standardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	-.274	.661	-.415	.680
	Partner's Assets Specificity	.106	.075	1.411	.164
	Perceived Satisfaction	.661	.110	5.998	.000
	Partner's Reputation	.197	.154	1.279	.207
	Perceived Conflict	-.084	.062	-1.354	.182

Regression for Trust level on the four correlated independent variable results $R^2 = 0.633$ i.e. 63.3% predictability of the model. However, only Perceived Satisfaction was found with significant coefficient ($\beta = 0.661$). Therefore, another regression was run with only one predictor i.e. perceived satisfaction and R^2 was found 0.579 and coefficient $\beta = 0.808$. This concludes that in the electric products distribution business in Bangladesh, only perceived satisfaction of the partner has some bearing on changing level of trust between supply chain members. Therefore, supports only alternative hypothesis H_5 .

Table 7: Regression Analysis of Trust on Perceived Satisfaction

Variables	Un-standardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	-.153	.393	-.390	.698
Perceived Satisfaction	.808	.096	8.453	.000

In order to draw relationships between trust and commitment, corresponding correlation and regression were done and the results have been given in the following tables.

Table 8: Correlation between Trust and Commitment

	Commitment	Significance	Hypothesis
Trust	0.726**	.000	H_8

Note: Correlation is significant at the 0.01 level (2-tailed), $N = 54$

Table 8 discloses that trust ($r = 0.726^{**}$) possess a signification strong positive correlation with commitment. It was significant even if 1% level of significance. Therefore, alternative hypothesis H_8 has been supported. However, the extent of influence of trust on commitment can be evident in their regression result.

Table 9: Regression Analysis of Trust on Commitment

R^2	Variables	Regression Coefficient, β	t values	Significance
0.527	Predictor: Trust Dependent Variable: Commitment	0.994	7.613	0.000

Table 9 shows that trust level explains 52.7% of commitment level and they are positively associated i.e. increase in trust will increase in commitment. One unit of increase of trust will increase commitment by almost one unit ($\beta = 0.994$) and this beta value is also significantly different than zero i.e. this result did not come from random error. Therefore, alternative hypothesis H_8 has been accepted.

DISCUSSION

This study started with three objectives and eight hypotheses. The first objectives – to identify the factors affecting trust in the supply chain relationships – was achieved by literature review that resulted six constructs of trust namely asset specificity, behavioral uncertainty, information sharing, perceived satisfaction, partner's reputation and perceived personal conflict with the supply chain partner. However, after the correlation analysis the number of constructs reduced to four by eliminating behavioral uncertainty and information sharing constructs. Same as previous studies elsewhere and the hypotheses, partner's asset specificity, perceived satisfaction and partner's reputation were found positively associated with trust and perceived personal conflict was negatively associated with trust. Therefore, firms might consider investment on transaction-specific assets in order to achieve higher favorable devotion from their supply chain partners. Such investment will also increase firm's reputation in the market and decrease their interpersonal/inter-organizational conflict which in turn will increase trust further. It may be a rational response to enhance highly deserving commitment from the partner which was later found significantly related with trust.

Only factor that was found strongly correlation and also significantly influencing the trust was perceived satisfaction. Satisfaction is social variable that is developed from multiple financial and non-financial variables. Therefore, firms must continuously strive for its supply chain members' satisfaction instead of thinking that they are the business foe. Trust will be the automotive response of such satisfaction. All the factors used for measuring trust could be mistakenly thought as the determinant of satisfaction though previous literature found different results.

Information sharing among supply chain members is not very much common in Bangladesh. Since arm's length relationships most exists between business partners, they also don't fully trust information supplied by the channel members. The Survey also excluded producer's/importer's owned showrooms and sales centers that may another reason for distrusting supplied information. And behavioral uncertainty is common for distrusted information. These may be the reason for not getting these two factors significantly related with trust building process. As the information sharing become from frequent and trustworthy these two factors were also be significant predictor of trust.

Finally this study shows that there is a significant positive relation between trust and commitment. It is difficult to imagine a serious business commitment without trust. Morgan and Hunt (1994) called trust a major determinant of relationship commitment. However, initiating and implementing supply chain trust is not an easy job. Thus, success will take time and is only achieved by honest, devoted, transparent and win-win relationships based on trust and commitment between the satisfied participants.

CONCLUSION

The importance of trust in building commitment for supply chain partnership has been re-authenticated in this research for electronics distribution business in Bangladesh. Several factors were also identified the impact on building trust in this sector. This initiative will surely help both academicians and practitioners for onward research and business improvement respectively.

Managerial Implications

This study provides several managerial implications. Firstly, supply chain partners should develop trust among them to improve commitment level in the supply chain partnership. Secondly, this study provides supply chain partners with evidentiary indicators to measure the level of trust and commitment in the supply chain relationship. Thirdly, collaborative efforts among trading partners may be the best way to minimize uncertainty and enhance the degree of trust. This information may include, but not be limited to, operational data (utilization rate, productivity goals, production and distribution systems) and forecasting data (volume, product and market strategy). Financial data (activity costs, cost of goods sold per unit, return on capital, carrier cost-and-profit structure) and supply chain data (cost and value-added propositions) should also be shared and partner's confidentiality should be maintained. Finally supply chain partners require knowledge of social relationship building skills. Top management must recognize that these skills are essential requirement for successful supply chain implementation.

Limitation and Future Research

The study has some limitations. Firstly, convenience sampling technique was used to select respondents which might limit the generalizability of the findings. Secondly, the sample size (N = 54) was inadequate for the study. A larger number of samples would be better for investigating the impact of trust on the commitment in the supply chain relationship. Thirdly, large-scale study was not possible due to time and budget constraints. Fourthly, there may be some circular relationships among the variables. Such as, information sharing, asset specificity, perceived satisfaction may have a circular relationship with trust. In future studies, a complete research model that adequately explains the circular relationship will be a more interesting literature. Finally, trust is an ever-changing phenomenon, constantly affecting and being affected by most activities in economic and non-economic transactions. Therefore, a research model with panel data that can span series of interactions regarding trust is indeed required for a more complete understanding of trust in supply chain partnerships.

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