

Role of Buyer-Supplier Relationship on Buying Firm's Performance in Chemical Sector of Pakistan

Tahira R. Hassan, Abirah Habib and Maria Khalid
APCOMS, Rawalpindi, Pakistan.

Abstract

This research paper aims at proving the importance of buyer-supplier relationship for the enhancement of the performance of the customer firm. The six companies that have been focused belong to the listed chemical sector in KSE 100 index. The Buyer-Supplier Relationship (measured through seven factors including Frequency of Communication, etc.) has been taken as independent variable where as buyer's performance (measured through financial indicators like ROA and ROE) has been taken as dependent one. The data used has been collected through questionnaires as well as from the annual reports of the companies under study. Descriptive statistics, Pearson's Correlation and Ordinary Least Squares (OLS) method has been used to analyze the data. Results reveal positive as well as negative correlation between some of the factors. The regression results are unrealistic due to the fault in data collected through questionnaire. Also some recommendations have been made to help buyers develop their relationships with the suppliers.

Keywords: Buyer-Supplier Relationship, Buyer's Performance. Chemical Sector

This research has been undertaken to assess the importance of the relationships between buyers and suppliers and the benefits they create or threats they pose to the buying firm's financial health. The focus of this study has been the foreign countries. Pakistani market especially chemical sector has long been neglected by the theorists. May be this is the sole reason why the corporate sector of Pakistan is lagging behind in implementing the corporate governance's practices as supplier relations are being neglected due to poor knowledge of its importance. So this work focuses on the companies listed at chemical sector in KSE 100 index of Pakistan. This research will help the Pakistani corporate world to develop in a way that will surprise the international market also.

Supplier Relationship management has been one of the core concepts discussed in Total Quality Management (TQM) and can be described as a part of a company's strategic framework that works for risk mitigation, quality uplift, collaborative ties with important business suppliers, profit maximization and customer delight. Healthy relations with suppliers are a result of trust that prevail between the two parties leading to extraordinary performance of the customer firm. What you need is good and loyal suppliers and in return you should also be loyal to them, that is what generates trust between the two. Having loyal suppliers leads to production of high quality products, create a reliable image of the buyer as timely deliveries are ensured, higher competitive edge, enhanced creativity and overall low costs. But here one thing should not be forgotten that suppliers can take the buyer for granted to set their own preferred terms and conditions.

Literature Review

The number of studies which have worked on the importance of relationships between buyers and suppliers is vast. Ford (1980) indicated that it is not just only buyers who are dependent on suppliers but it is vice versa also, so it is important to value the relationship between them. "Traditional relationships no longer suffice; closer, more collaborative approaches are needed" (Spekman, 1988). Han, Wilson and Dant (1993) indicated the factors forcing the firms to use a small number of suppliers with the passage of time. They also highlighted the benefits for buyers having strong ties with suppliers.

Heide and Stump (1995); Ravald and Gronroos (1996); Bharadwaj (2000); Tan (2001); Johnston, McCutcheon, Stuart and Kerwood (2004); Rai, Patnayakuni and Seth (2006); Belonax Jr., Newell and Plank (2007); and Schiele (2012) were also among those who studied the importance of a firm's relationships with its suppliers and its impact on performance level. Doney and Cannon (1997) argued that trust is a fundamental for having firm relationship between buyers and suppliers. It can be declared that lack of trust results into lack of commitment from both sides.

Hartley, Zirger and Kamath (1997) debated that if there exists a strong relationship with the suppliers than it is likely to result in timely product development as suppliers would do their best to make a timely and high quality delivery. Carr and Pearson (1999) used five relationships to describe the importance of buyer supplier relationships and used fifth to highlight their financial implications. The results supported their all the five generated relationships. "...the development of effective supplier partnerships may also require different selection and monitoring practices" (Ittner, Larcker, Nagar & Rajan, 1999).

Shin, Collier and Wilson (2000) argued that if a firm is managing its remarkably than it is prone to having a remarkable performance resulting from higher quality products and services with a strong customer base. "...increased communication frequency, ... product quality ... lower customer firm costs"(Cannon & Homburg, 2001). Tracey and Tan (2001) claimed that the firms need to check the bidders' product and service quality and match it with the price they are offering before selecting them as a supplier so as to delight the customers in every expectation they have with the firm. Fynes and Voss (2002) assessed the effects of strong relationships with suppliers on buyer's performance especially in terms of operations and quality.

Kannan and Tan (2002) claimed that in today's era of competition firms are far more dependent on their suppliers in terms of both quality and efficiency therefore they need to choose their suppliers more cautiously. Kaynak (2003) studied the implications of total quality management processes with respect to their impact on a firm's performance and found out that of all other TQM factors, supply chain management is the most crucial one. Kotabe, Martin and Domoto (2003) investigated how the buying and supplying firms could benefit from mutual knowledge sharing, strong cords and long-term focus. Chen, Paulraj and Lado (2004) argued that purchasing especially strategic one plays an important role in earning competitive advantage for a firm and for that purpose it needs to strengthen its cords with its various suppliers for to reap long-term rewards.

Crichton (2004) argued that with the growing trend of outsourcing one should understand the need of strong ties with suppliers and for this he highlighted the importance of relationships in his work. Duffy and Fearnle (2004) used a sample of fresh product producers of London and emphasized on having "*cooperative long term partnerships*" with suppliers in order to sustain profitability and performance. Humphrey, Li and Chan (2004) indicated that material is an essential to develop any product and for that the firms' need suppliers. So they should do whatever they can to create long term yet profitable relationships with their various suppliers. Hoetker (2005) also discussed the criteria on the basis of which firms should select their suppliers. Holland (2006) indicated that threats and force cause damage to relationships with suppliers and mostly result in cancellation of contracts.

Li, Ragu-Nathan, Ragu-Nathan and Subba Rao (2006) claims that in order to achieve and sustain competitive advantage a firm needs to have strong ties with its many suppliers. Cousins and Lawson (2007) also argued by using manufacturing firms as sample that collaborative relationships are needed in order to maintain the level of performance. Krause, Handfeild and Tyler (2007) studied importance of supply chain management by using multiple factors to measure the relationship between buyers and suppliers and the performance of buying firm. Koury (2008) claimed that strong ties guarantee healthy profits. Paulraj, Lado and Chen (2008) indicated that frequency and quality of communication between buyers and suppliers also plays a vital role in strengthening the cords between them.

Wagner (2008) argued that strong ties with suppliers help in enhancing creativity and quality product manufacturing. Kr. Nayak, Sinha and Guin (2011) indicated that total price is far more important than shelf price so forcing suppliers to reduce price shall be abandoned instead they should be forced to improve quality. Mburu (2012) emphasized that it is buyers' duty to select the best suppliers for a job. Also he reminded that successful relationships with suppliers will evidently result into buyers' success that can be sustained for a longer term than usual. Narain and Singh (2012) exclaimed that trust and communication is what that can make or destroy relationships between buyers and suppliers. Bankston (2013) argued that politeness works in managing relationships with suppliers. He also says "supplier relationship management is a formidable tool in global competition".

Methodology

Participants:

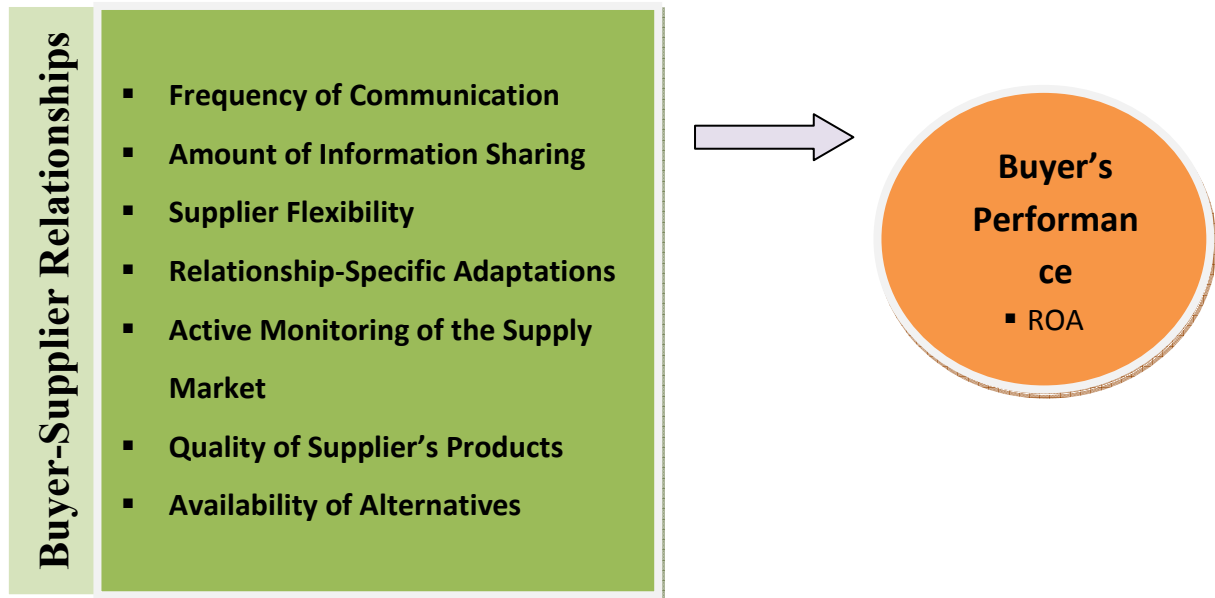
There are total thirty companies in the KSE 100 listed chemical sector of Pakistan. In order to test the data, a sample of nine companies was used. Only six filled the questionnaire and remaining three did not reply. The convenience sampling was used and companies within the twin cities were chosen.

Procedure:

The selected factors that predicted the independent variable "*Buyer-Supplier Relationship*" were "*Frequency of Communication*" (by combining the items for face-to-face, telephonic and written communication), "*Amount of Information Sharing*", "*Supplier Flexibility*", "*Relationship-Specific Adaptations*", "*Active Monitoring of the Supply Market*", "*Quality of Supplier's Products*" and "*Availability of Alternatives*". The dependent variables used to assess performance of the buying firm are "*Return on Assets*" (ROA) and "*Return on Equity*" (ROE).

Both primary and secondary data has been used. The questionnaire was adopted from the work of Cannon and Homburg (2001). Five point Likhert Scale was used. The items for each factor along with the scale at which they are were assessed have been presented in the Appendix. Organizational as well as supplier names were also obtained from each firm. Secondary data was obtained from the annual reports of the sample firms. "*Descriptive Statistics*" were calculated for the data and "*Correlation*" as well as "*Ordinary Least Square*" method was used to analyze the data. The model under study along with the hypotheses have been displayed below:

H_a: Strong Buyer-Supplier Relationships lead to High ROA
H_b: Strong Buyer-Supplier Relationships lead to High ROE



Results

In this segment, the descriptive and practical results of data analysis have been presented. Table 1 demonstrates the descriptive statistics for the very recent data. The results show that the variables have positive mean values ranging from 0.151 to 3.593. Standard deviation ranges from almost 18.8% to around 90.7%. Distribution of seems to be negatively skewed except for “*Availability of Alternatives*”, “*ROA*” and “*ROE*”.

**Table-1
 Descriptives**

	N	MIN	MAX	MEAN	STD.DEV	SKEWNESS
ALT	6	2.250	4.250	2.875	0.720	1.807
INFO SHAR	6	2.333	3.333	2.667	0.422	0.889
SUPP FLEX	6	2.500	4.000	3.500	0.570	-1.214
REL SPEC	6	1.000	3.400	2.567	0.907	-1.247
ACT MON	6	2.400	3.400	3.100	0.352	-2.144
PROD QUAL	6	2.500	3.000	2.792	0.188	-0.313
ROA	6	-0.160	0.506	0.151	0.237	0.441
ROE	6	0.070	0.799	0.346	0.289	0.804
COMM FREQ	6	2.556	4.333	3.593	0.650	-0.684

Table 2 demonstrates the correlation analysis for the data. ROA and ROE have highly positive correlation at 95% confidence level. Same can be held true for both “*Active Monitoring of Supply Market*” and “*Supplier Flexibility*” with “*Relationship-Specific Adaptations*”. “*Availability of Alternatives*” has highly negative correlation with both “*Supplier Flexibility*” and “*Active Monitoring*” at 95% confidence interval. Also “*Active Monitoring*” has highly negative correlation with “*Availability of Alternatives*” at 95% confidence interval.

Table 3 demonstrates that there does not exist any kind of relationship between dependent and independent variables. In short there are no results at all as there is no significance for all the independent variables and no coefficient values for some. Also the model has been rejected entirely.

Table-2
Correlation

* indicates significance at 0.05 level

		COMM FREQ	ROE	PROD QUAL	ROA	ACT MON	REL SPEC	INFO SHAR	SUPP FLEX	ALT
COMM FREQ	Pearson Correlation	1								
	Sig. (2-tailed)									
	N	6								
ROE	Pearson Correlation	-0.626	1							
	Sig. (2-tailed)	0.184								
	N	6	6							
PROD QUAL	Pearson Correlation	0.303	-0.115	1						
	Sig. (2-tailed)	0.560	0.828							
	N	6	6	6						
ROA	Pearson Correlation	-0.320	0.842*	-0.010	1					
	Sig. (2-tailed)	0.536	0.036	0.851						
	N	6	6	6	6					
ACT MON	Pearson Correlation	0.388	0.389	0.226	0.575	1				
	Sig. (2-tailed)	0.447	0.446	0.666	0.232					
	N	6	6	6	6	6				
REL SPEC	Pearson Correlation	0.236	0.228	-0.049	0.265	0.814*	1			
	Sig. (2-tailed)	0.652	0.664	0.927	0.612	0.049				
	N	6	6	6	6	6	6			
INFO SHAR	Pearson Correlation	-0.135	-0.275	-0.840*	-0.434	-0.449	0.000	1		
	Sig. (2-tailed)	0.799	0.598	0.036	0.390	0.372	1			
	N	6	6	6	6	6	6	6		
SUPP FLEX	Pearson Correlation	0.315	0.316	0.583	0.438	0.897*	0.716	-0.693	1	
	Sig. (2-tailed)	0.544	0.542	0.225	0.384	0.015	0.110	0.127		
	N	6	6	6	6	6	6	6	6	
ALT	Pearson Correlation	-0.095	-0.546	-0.231	-0.798	-0.887*	-0.651	0.604	-0.852*	1
	Sig. (2-tailed)	0.858	0.263	0.660	0.057	0.018	0.162	0.204	0.031	
	N	6	6	6	6	6	6	6	6	6

Table-3
OLS

		ROA	ROE
ALT	coefficient	-0.588	0.624
	t-value	-	-
	p-value	-	-
REL SPEC	coefficient	-0.836	-0.747
	t-value	-	-
	p-value	-	-
ACT MON	coefficient	0.99	2.02
	t-value	-	-
	p-value	-	-
PROD QUAL	coefficient	-0.363	-0.121
	t-value	-	-
	p-value	-	-
COMM FREQ	coefficient	-0.454	-1.138
	t-value	-	-
	p-value	-	-
INFO SHAR	coefficient	-	-
	t-value	-	-
	p-value	-	-
SUPP FLEX	coefficient	-	-
	t-value	-	-
	p-value	-	-
F-value	-	-	
p-value	-	-	

Discussion

The results show that most of the respondents have filled the questionnaires non-seriously which has resulted into faulty that cannot be used for any kind of analysis or interpretation. This faulty data provides unrealistic values for the items used in the questionnaire.

Conclusion

In this section, some recommendations will be made to the buyers in order develop their relationships with the suppliers. Firstly, make timely payments. Secondly, provide adequate time span to make the delivery. Thirdly, try to be friends with your suppliers i.e. take the relationship to personal level. Finally, share with them such an information that will make them feel trusted as everyone loves to be trusted. By using these techniques, buyers can easily make their profits reach the sky.

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APPENDIX
Questionnaire

1-Never to 5-Always	
Frequency of Communication	
1	this supplier's salesperson face-to-face?
2	this supplier's service/support personnel face-to-face?
3	other people from this supplier face-to-face?
4	this supplier's salesperson on the phone?
5	this supplier's service/support personnel on the phone?
6	other people from this supplier on the phone?
7	this supplier via electronic mail or EDI?
8	this supplier via fax?
9	this supplier via regular mail?
1-Strongly Disagree to 5-Strongly Agree	
Amount of Information Sharing	
10	This supplier rarely talks with us about its business strategy.
11	This supplier frequently discusses strategic issues with us.
12	This supplier openly shares confidential information with us.
Supplier Flexibility	
13	This supplier is flexible enough to handle unforeseen problems.
14	This supplier can readily adjust its inventories to meet changes in our needs.
15	This supplier is flexible in response to requests we make.
Relationship-Specific Adaptations	
16	Just for us, this supplier changed its inventory and distribution.
17	Just for us, this supplier changed its marketing.
18	Just for us, this supplier changed its product's features.
19	Just for us, this supplier changed its personnel.
20	Just for us, this supplier changed its capital equipment and tools.
Active Monitoring of the Supply Market	
21	We usually get more than one bid when we purchase this product.
22	This supplier is our sole source for this product.
23	We do not even consider other suppliers for purchases of this product.
24	We try to use multiple sources for this particular supply.
25	We often check the price and quality of other vendors of this product.
Quality of Supplier's Products	
26	This supplier's products are of high quality.
27	This supplier often fails to meet our quality requirements.
28	We often complain about this supplier's products.
29	This supplier exceeds our quality expectations.
Availability of Alternatives	
30	Other vendors could provide what we get from this firm.
31	This supplier almost has a monopoly for what it sells.
32	This is one of the few suppliers we could use for this product.
33	No other vendor has this supplier's capabilities.