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**Identifying Value-Based Differentiation in  
Business Relationships: An empirical study**

*Parallel Session 4 :*

Science parks and their businesses: new models, new opportunities

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# Identifying Value-Based Differentiation in Business Relationships: An empirical study

## Abstract

In the literature, considerable attention has been given to the role of value creation in collaborative buyer–seller relationships. However, product and price become less important differentiators than before, especially in technology sector, suppliers of routinely purchased products search for new ways to differentiate themselves in a business relationship which is a source of competitive advantage. This research aims to enhance understanding of differentiation through value creation in buyer–seller relationships. The model is tested on data collected from technology companies in the science park in Turkey. The results indicate that relationship benefits display a stronger potential for differentiation in key supplier relationships than cost considerations.

## Introduction

There has been a growing recognition among academicians and practitioners that collaborative buyer–seller relationships represent a source of competitive advantage. Buyers and sellers in industrial markets can turn single transactions into long-term beneficial relationships by a deeper understanding of the complex connection between them. Along with the recognition of the strategic importance of supplier relationships, firms have fundamentally changed the way they manage supplier portfolios. To be effective, differentiation in business relationships from value-based perspective must contribute to customer value by either providing benefits to the customer or lowering a customer's costs.

## 2. Conceptual framework and hypotheses

### 2.1. Relationship value

Value can be considered to be a trade-off between benefits and sacrifices (Barry and Terry, 2008), it can be defined monetarily and also reflect non-monetary revenues such as market position, competencies, or social rewards (Wilson, 1995). According to this conceptualization, value in business relationships has two sides, one side is the object of the business transactions (product or service) and the other side is certain product or service offering beyond the product or service.

Relationship marketing focuses on the business relational exchanges create more value for both sides (buyer and seller) than single transactions. Relationship value must reflect the characteristics and nature of the interaction process (Gummesson, 2004). We will analyze the relationship value by focusing on the relationship benefits and relationship costs. Because, the purpose for a customer firm and supplier firm engaging in a collaborative relationship is to work together in ways that add value (benefit) or reduce cost in the exchange between the firms.

Cannon and Homburg (2001), indicated that “one method for creating value is to reduce costs in business relational exchange.” They identified three sources of relationship costs: (1) direct costs, (2) acquisition costs, and (3) operations costs. They proposed that, a supplier's success in lowering a customer firm's relationship costs.

A more comprehensive theory would consider costs and benefits beyond economic costs.” There is a consensus about relationship costs in marketing literature (Ulega and Egger, 2009; Voss and Kock, 2013). But there is no any consensus about relationship benefits in marketing literature. Ulaga and Eggert (2006), proposed that core offering, sourcing process, and customer operations as relationship benefit dimensions. In this study, we focus on Ulaga and Eggert's approach because they allow for the assessment of the important value drivers of supplier value offerings (Lefaix-Durand and Kozak, 2010) and have received higher acceptance in the marketing literature (Barry and Terry, 2008; Čater and Čater, 2009 ).

According to the above discussion, we offer the following hypotheses;

H1; Relationship benefits affects relationship value directly and positively.

H2; Relationship costs affects relationship value directly and negatively.

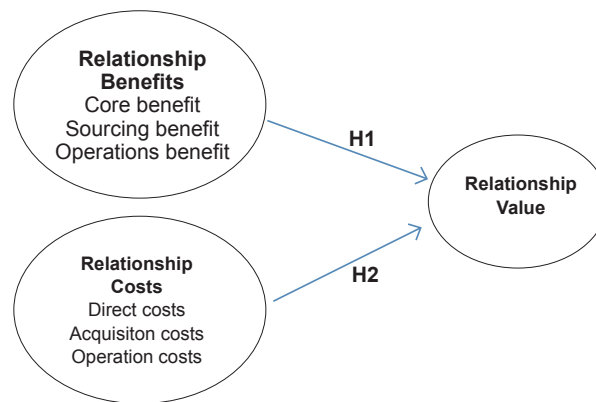


Fig 1: Research Model

### 3. Methodology

#### 3.1. Research Sample

This study analyzes firms in the Turkish R&D companies in the science-park in Kocaeli, Turkey. Kocaeli is the industrial city and technology hub of Turkey. A survey to 60 companies in Kocaeli, Turkey provides the sample data. The profile of the sample firms is summarized in Table 1.

Technology is a young, science-based industry. Technology firms in the science park are characterized by high investment in R&D and are organized along similar lines to a university laboratory, which facilitates the creation of common technological communities between universities and technology.

Table 1  
Sample firm profile (N=60).

Sample characteristics	Frequency	%
Industry		
Information technology	29	46
Medical	10	16
Industrial automation	6	10
Energy	4	7
Aviation	2	3
Electronics	2	3
Chemicals	4	7
Automotive	4	7
Company's annual sales (\$)		
Less than 250.000	28	47
250.000 - 500.000	10	17
More than 500.000	22	37
Company's marketing expenditure (\$)		
Less than 50.000	24	40
50.000 - 100.000	24	40
More than 100.000	12	20

### 3.2 Research Survey

Data comes from personal interviews and the survey. We asked participants to compare the main supplier with the second supplier for several reasons. Because, managers typically compare these two alternatives when making value judgments. Also, respondents needed to use similar comparison standards to allow for meaningful comparisons (Ulaga and Eggert, 2006). Finally, from a managerial perspective, we were interested in understanding how suppliers achieve a main supplier position and defend it against their toughest competitor, that is, their challenger in terms of purchasing volume.

### 3.3. Measures

Relationship benefits measurements uses Ulega and Egger (2006) scale. The relationship costs and value measurement instrument adapts uses Cannon and Homburg (2001) scale. The measurement of all constructs uses a five-item Likert scale (1 = completely disagree; to 5 = completely agree).

#### 3.3. Data Analysis

To test the research model, this study uses the partial least square (PLS) technique, a variance-based structural equation modeling (SEM) method. This study uses the SmartPLS software (Ringle, Wende, & Will, 2005) simultaneously for the measurement model and the structural model analysis.

## 4. Results

### 4.1.Measurement model

Results confirm constructs' high internal consistencies (Table 1). Cronbach's alpha (higher than 0.9 for all measures) verifies validity. Bagozzi and Yi's (1988) composite reliability index (all values higher than 0.8), and Fornell and Larcker's (1981) average variance extracted index (higher than 0.7 for all measures) (Table 2).

Table 2

Scale Statistics: Means, Standard Deviations, Measure Reliabilities, Average Variances Extracted (AVE), and Correlations

Constructs	Number of items	$\alpha$	M	SD	CR	AVE	1	2
1. Relationship benefits (RB)	29	0.97	0.97	3.58	0.754	0.975	0.584	
2. Relationship costs (RC)	9	0.96	2.63	0.802	0.92	0.623	-0.384	
3. Relationship value (RV)	4	0.95	3.45	0.968	0.975	0.907	0.825	-0.431

\*\* $p < .05$

Notes:  $\alpha$  = cronbach alpha, M = mean, SD = standard deviation, CR = composite reliability, and AVE = average variance extracted.

## 4.2. Structural model

As Henseler et al. (2009) note, the use of bootstrapping (5000 resamples) generates standard errors and t-statistics to evaluate the statistical significance of the path coefficients. All items load on their hypothesized factors and they are summarized in Table 3.

Table 3

Factor Loadings

Constructs	Measures	Loadings
RELATIONSHIP BENEFITS	Compared to the second supplier, the main supplier provides us with better product quality.	0.953
	Compared to the second supplier, the main supplier meets our quality standards better.	0.914
	Compared to the second supplier, the main supplier's products are more reliable.	0.898
	Compared to the second supplier, we reject less products from the main supplier.	0.627
	Compared to the second supplier, the main supplier provides us with more consistent product quality over time.	0.837
	Compared to the second supplier, we have less variations in product quality with the main supplier.	0.889
	Compared to the second supplier, the main supplier provides us with better services.	0.903
	Compared to the second supplier, the main supplier is more available when we need information.	0.898
	Compared to the second supplier, the main supplier provides us with more appropriate information.	0.933
	Compared to the second supplier, the main supplier responds faster when we need information.	0.611
	Compared to the second supplier, the main supplier performs better in meeting delivery due dates.	0.784
	Compared to the second supplier, we have less delivery errors with the main supplier.	0.627
	Compared to the second supplier, deliveries from the main supplier are more accurate (no missing or wrong parts).	0.793
	Compared to the second supplier, the main supplier provides us a better access to his know-how.	0.450
	Compared to the second supplier, the main supplier knows better how to improve our existing products.	0.732
	Compared to the second supplier, the main supplier performs better at presenting us with new products.	0.360
	Compared to the second supplier, the main supplier knows better how to help us drive innovation in our products.	0.558
	Compared to the second supplier, the main supplier knows better how to assist us in new product development.	0.548

RELATIONSHIP VALUE	Compared to the second supplier, the main supplier performs better in helping us improve our time to market	0.379
	Compared to the second supplier, the main supplier helps us more in improving our cycle time.	0.542
	Compared to the second supplier, the main supplier helps us more in getting our products to market faster.	0.611
	Compared to the second supplier, the main supplier performs better in helping us speed up product development.	0.547
	Compared to the second supplier, it is easier to work with the main supplier.	0.590
	Compared to the second supplier, we have a better working relationship with the main supplier.	0.904
	Compared to the second supplier, there is a better interaction between the main supplier's people and ours.	0.847
	Compared to the second supplier, we interact better with the main supplier.	0.766
	Compared to the second supplier, we can address problems more easily with the main supplier.	0.717
	Compared to the second supplier, we can discuss problems more freely with the main supplier.	0.767
	Compared to the second supplier, the main supplier gives us a greater feeling of being treated as an important customer.	0.703
	Compared to the second supplier, the main supplier adds more value to the relationship overall.	0.894
	Compared to the second supplier, we gain more in our relationship with the main supplier.	0.960
	Compared to the second supplier, the relationship with the main supplier is more valuable.	0.957
	Compared to the second supplier, the main supplier creates more value for us when comparing all costs and benefits in the relationship.	0.995
RELATIONSHIP COSTS	Purchasing price	0.852
	Ordering costs	0.833
	Delivery costs	0.746
	Inventory carrying costs	0.800
	Coordination and communication costs	0.843
	Manufacturing costs	0.699
	Down-time costs	0.739

Outcomes emphasize the relationships between customer relationship benefits, relationship costs, and relationship value. Results show that relationship benefits is a more influential antecedent of relationship value (H1:  $\beta=0.77$ ), than relationship costs (H2:  $\beta= -0.13$ ). Table 4 contains these results.

Table 4  
Structural modeling results.

Hypothesis	$\beta$	Path coefficients	T-statistics	Support
H1 (+) RB $\rightarrow$ RV	0.7733	14.3854	Yes	
H2 (+) RC $\rightarrow$ RV	-0.1342	1.604	No	

$R^2$  (RV) = 0.696

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

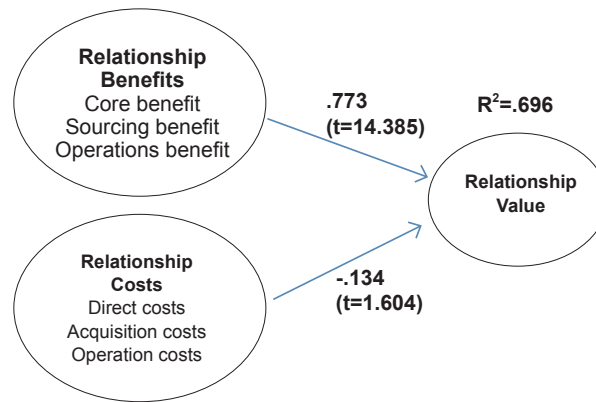


Fig. 2. Structural model

## 5. Conclusions and managerial implications

This research explores the effects of relationship benefits and relationship costs on relationship value in a relational business exchange. Relationship benefits becomes an important strategic resource that positively improves relationship value (Ulega and Egger, 2006). Our results suggest that relationship benefits display as stronger potential for differentiation than do cost considerations.

In the current study, we focused on key supplier relationships as units of analysis. From this perspective, relationship benefits and costs take on two very different roles. Whereas cost factors serve as key criteria to get a supplier on the short list of those vendors considered for business, relationship benefits dominate when deciding which supplier to name first among a set of available suppliers. Following this line of reasoning, cost competitiveness emerges as a necessary but not sufficient condition to gain key supplier status. In turn, offering superior benefits to the customer is essential for winning a substantial share of a customer's business.

Findings yield several implications for business managers. This research demonstrates that understanding and actualizing value creation (and value sharing) are critical aspects of business relationships between customer and supplier firms. That provides mutual gains to both sides of the relationship. So supplier companies should invest to their relationship with customer companies. Customer company and supplier company should engage in a collaborative relationship is to work together in ways that add value or reduce cost in the exchange between the firms. Also customer firms should pay attention more to the long-term relationship benefits than relationship costs.

Conventional wisdom posits that customers emphasize cost considerations in business markets. Our study propose that, customer companies should consider more relationship benefits than relationship cost. Also, supplier companies should focus on value creation by increasing benefits by reducing customers' cost.

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