



# The relationship between the perceived shares of costs and earnings in supplier development programs and supplier satisfaction<sup>☆</sup>

Sandra Praxmarer-Carus<sup>a,\*</sup>, Eric Sucky<sup>b</sup>, Sebastian M. Durst<sup>c</sup>

<sup>a</sup> Universität der Bundeswehr München, Werner-Heisenberg-Weg 39, 85577 Neubiberg, Germany

<sup>b</sup> University of Bamberg, Feldkirchenstr. 21, 96052 Bamberg, Germany

<sup>c</sup> Roland Berger Strategy Consultants GmbH, 70597 Stuttgart, Germany

## ARTICLE INFO

### Article history:

Received 4 October 2011

Received in revised form 24 August 2012

Accepted 24 August 2012

Available online 19 January 2013

### Keywords:

Supplier development program

Buyer–supplier relationships

Perceived fairness

Distributive justice

Supplier satisfaction

## ABSTRACT

Supplier improvement and supplier development are relevant management activities for industrial buyers. Supplier development programs require investments by both parties and may produce higher earnings. Thus, the distribution of costs and earnings between the parties is a relevant factor in this context. This study examines the effects of a supplier's perceived share of costs and earnings in supplier development programs on supplier satisfaction. In a sample of 38 suppliers, we find that the supplier's perceived share of earnings affects supplier satisfaction positively and that distributive fairness mediates this effect. According to our data, the perceived share of costs has no effect on supplier satisfaction. This result suggests that buyers should design supplier development programs in a manner that permits high cost shares for the suppliers, but gives those suppliers the impression that they significantly participate in the resulting earnings. In addition, using dyadic data from buyers and suppliers, this research indicates that the gap between the suppliers' and the buyers' perceptions of their share of costs and earnings is larger when suppliers are less competent. This finding may suggest that supplier development programs involving less competent suppliers require intense communication with those suppliers.

© 2013 Elsevier Inc. All rights reserved.

## 1. Introduction

One of the most significant paradigm shifts of modern business management is that companies no longer compete as individual autonomous enterprises but rather within supply chains (Lambert, 2008). Activities previously performed internally are often performed by external organizations (Christopher & Gattorna, 2005), and suppliers have a significant impact on a buying firm's market performance (Claycomb & Frankwick, 2010). Highly capable suppliers may provide the buyer with competitive benefits such as lower costs, superior quality, and technological innovation (Tracey & Vonderembse, 2000). Consequently, supplier management has become a relevant management activity (Croxtton, García-Dastugue, Lambert, & Rogers, 2001), and supplier improvement is a top priority for leading organizations (Carr, Kaynak, Hartley, & Ross, 2008).

To improve supplier performance, a large number of industrial buyers have established supplier development programs (e.g., Avery, 2008). Supplier development is defined here as any set of activities

that a buyer expends on a supplier to improve the supplier's performance and/or capability in a manner that meets the buyer's supply needs and generates favorable results (Krause & Ellram, 1997; Wagner, 2011). Examples of supplier development include activities such as training the supplier's staff, advising the supplier, furnishing temporary on-site support for the supplier and providing financial commitments to the supplier within the framework of joint investment projects (Joshi & Stump, 1999). Supplier development programs may result in higher quality, shortened product development cycles, and lower costs (Brennan & Turnbull, 1999). Supplier development is also a key factor in building partnership-like relationships and thereby improving mutual success (Modi & Mabert, 2007). As supplier development programs require investments by both parties and may lead to higher profits (Carr et al., 2008), the distribution of costs and additional profits between the parties is a relevant aspect in this context. However, this topic is largely unexplored (Gassenheimer, Hunter, & Siguaw, 2007). In particular, this paper addresses two gaps in the existing literature.

First, in the context of supplier development, previous research has not studied the effects of the supplier's perception of the distribution of costs and additional earnings (profits) on supplier satisfaction. The effects of the perceived share of costs and earnings on supplier satisfaction are a relevant topic for study because satisfaction is a major determinant of relationship quality (Lawrence, 2005). The literature demonstrates that partnership-like relationships with

<sup>☆</sup> This study was funded by the Roland Berger Strategy Consultants as part of the company's PhD program.

\* Corresponding author. Tel.: +49 89 6004 4211; fax: +49 89 6004 3908.

E-mail addresses: sandra.praxmarer@unibw.de (S. Praxmarer-Carus), eric.sucky@uni-bamberg.de (E. Sucky), sebastian\_durst@de.rolandberger.com (S.M. Durst).

suppliers improve the buying firm's performance (Liedtka, 1996; Noordewier, John, & Nevin, 1990). In addition, the supplier's satisfaction determines the firm's long-term orientation and commitment (Gladstein, 1984; Palmatier, Dant, Grewal, & Evans, 2006) and may also contribute to the buyer's reputation among other suppliers and customers (Griffith, Harvey, & Lusch, 2006; Palmatier et al., 2006; Wagner, Coley, & Lindemann, 2011). The current paper studies the effects of a supplier's perceived share of costs and earnings in supplier development programs on supplier satisfaction. Furthermore, we analyze whether the perceived share of earnings has a stronger effect on perceived distributive fairness than the perceived share of costs. This comparative analysis may help buyers to construct their supplier development programs in a manner that improves suppliers' satisfaction. The study uses data from 38 suppliers to test the related hypotheses.

Second, previous studies have not compared buyers' and suppliers' perceptions of their respective share of costs and earnings using dyadic data. However, such potential perception gaps are relevant for investigation because they provide sources for misunderstandings that can lead to the dissatisfaction of a partner and the consequent termination of the business relationship by that partner. A consistent perception is, for instance, when both partners indicate that the supplier accounts for 60% of the program's costs. An inconsistent perception occurs when the buyer and the supplier both perceive that they incur 60% of the costs. The current study analyzes asymmetries in buyers' and suppliers' perceptions of their shares of costs and earnings in supplier development programs and tests whether perception gaps depend on supplier competence. It is relevant to identify factors that may contribute to smaller or larger perception gaps, as such knowledge may enable buyers to anticipate potential problems related to perceived distributive fairness. The study uses buyers' and suppliers' dyadic perceptions (38 data pairs) to test hypotheses related to perception gaps.

The structure of this paper is as follows. Section 2 introduces supplier development programs. In Section 3, the paper discusses the effects of the perceived share of costs and earnings on supplier satisfaction and presents the hypotheses H1 through H3. Then, in Section 4, the paper discusses potential perception gaps regarding the sharing of costs and earnings as perceived by the buyer and the supplier (hypotheses H4a and H4b). Sections 5 and 6 present the empirical study testing our hypotheses. Section 7 discusses the findings and Section 8 discusses limitations of the study and suggests avenues for future research.

## 2. Supplier development programs

Within the automotive industry, Toyota initially began using supplier improvement groups, and other companies have followed establishing a variety of these groups during the 1990s, including BP (Best Practice, Best Process, and Best Performance) at Honda, PICOS (Purchased Input Concept Optimization with Suppliers) at GM/Opel, DFL (Drive For Leadership) at Ford, POZ (Process Optimization of Supplier Parts) at BMW, and KVP<sup>2</sup> (Continuing Improvement Process) at Volkswagen. In addition, supplier development has become increasingly important outside the automotive industry. At John Deere, a supplier development program improves suppliers' just-in-time capabilities (Golden, 1999). In the aerospace and defense industry, the joint supplier development program SEA (Supplier Excellence Alliance) was established by several firms, including Boeing and Lockheed (Avery, 2008).

Supplier development refers to any activity that a buyer undertakes to improve a supplier's performance and/or capabilities to meet the buyer's short- or long-term supply needs. Previous research demonstrates that these activities may vary greatly and can include assessing suppliers' operations, providing incentives to improve performance, enhancing competition among suppliers, or working

directly with suppliers, e.g., through training and consultations. Essentially, supplier development refers to a multitude of company activities to improve suppliers' performances by producing, e.g., improvements in quality, cost, lead times, service, and reliability, and/or the enhancement of methodological knowledge in production. Table 1 provides examples of various supplier development activities.

Supplier development programs seek to improve suppliers' performance and, consequently, to strengthen the buyer's competitiveness. Studies by Carr et al. (2008) and Wagner (2005) demonstrate the positive effects of supplier development on supplier performance. Studies by Sánchez-Rodríguez (2009) and Humphreys, Li, and Chan (2004) report the beneficial consequences of supplier development on the buying firm's operating performance. In particular, these consequences can include improvements in time, quality and/or cost for the buying firm that produces improved overall business performance.

When the current paper uses the term "earnings" in the context of supplier development, we are referring to additional profits resulting from supplier improvement. On the one hand, the benefits or additional earnings created by supplier development are cost savings. These savings may be achieved through lower costs for materials, quality control, manufacturing, logistics, and/or reductions in production times. On the other hand, additional profits may be generated from improvements in technology and innovation, product quality, service quality, production flexibility, or reputation. However, the concrete savings and benefits achieved, depend on the length, size, and type of the specific development project and vary between projects. While a certain program may focus on cost reductions regarding logistics, other programs may focus on quality improvements or on technological innovations. Consequently, the types of benefits related to these programs and their weights vary. Thus, in the current paper, the term additional "earnings" does not represent predetermined types of profits, but represents what applies in the

**Table 1**  
Examples of supplier development activities.

Source	Main findings
Krause (1997)	<p>Exploratory factor analysis is used to identify the following three supplier development practices based on a list of 13 items derived from literature:</p> <ul style="list-style-type: none"> <li>– Direct firm involvement, including activities such as formal and informal evaluation, feedback, recognition, certification, site visits or training/education of the supplier,</li> <li>– Incentives, which involve an implied commitment from the customer if the supplier improves, and</li> <li>– Enforced competition, which does not imply a customer commitment.</li> </ul>
Sánchez-Rodríguez, Hemsforth, & Martínez-Lorente (2005)	<p>Supplier development practices are categorized based on the level of involvement and implementation complexity using confirmatory factor analysis:</p> <ul style="list-style-type: none"> <li>– Basic supplier development, including activities such as evaluating supplier performance through feedback or sourcing from a limited number of suppliers,</li> <li>– Moderate supplier development, including activities such as visiting suppliers to assess their facilities or rewarding and recognizing a supplier's performance, and</li> <li>– Advanced supplier development, including activities such as supplier training or the supplier's participation in the buyer's new product development process.</li> </ul>

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات