



Pergamon

Technovation 22 (2002) 341–351

technovation

www.elsevier.com/locate/technovation

Balanced relationships: management of client–supplier relationships in product development

P.M. Wognum ^{a,*}, Olaf A.M. Fisscher ^a, Suzanne A.J. Weenink ^b

^a University of Twente, Faculty of Technology and Management, Department of Technology and Organisation, P.O. Box 217, 7500 AE Enschede, The Netherlands

^b Polynorm Automotive BV, Bunschoten, The Netherlands

Received 14 October 2000; received in revised form 28 February 2001; accepted 15 March 2001

Abstract

In strongly competing markets, such as the automotive industry, collaboration between clients (e.g., OEM) and suppliers is changing. Ford and Chrysler are examples of companies that no longer consider suppliers as mere component producers, but as partners in the creation of innovative products. Clients outsource not only production of parts to suppliers, but also the development of parts and increasingly the development of complete (sub)systems. Collaboration in product development between client and supplier is becoming more and more important.

Management of collaboration is, however, extremely complex given the number of unsuccessful collaborative efforts. Apparently, problems in managing collaboration are different from the problems managers are used to encountering. However, little is known yet about the problems in collaborative projects between clients and suppliers.

In this paper, a number of problems in collaborative projects will be identified. The paper is based on case studies in three Dutch companies involved in changing client–supplier relationships. © 2002 Elsevier Science Ltd. All rights reserved.

Keywords: Client–supplier relationships; Collaborative design; Organisational change

1. Introduction

Collaborative product development forms an answer to the market demands that are changing due to globalisation of competition and individualisation of consumer wishes. Today, consumers expect a varied assortment of innovative and highly qualified products. Moreover, client organisations are forced to develop and produce these products in limited time against low costs to stay ahead of competition.

However, companies have increasingly less time, fewer people, and less financial means to satisfy the market demands alone. Extensive collaboration with suppliers offers companies possibilities to gain fast access to specialist knowledge and capabilities, to spread and share costs and risks, and to better exploit the expertise

of their partners (Douma, 1997; Quinn and Hilmer, 1994; Littler et al., 1995).

Close collaboration between client and supplier fits the ‘lean-production’ approach (Womack et al., 1990). In this approach, the product creation process as a whole is considered, instead of each of the companies that perform a part of this process (Lamming, 1996). Each activity that is executed at a client or at a supplier on behalf of the product to be created contributes to the success of that product. To achieve success collaboration is essential.

Management of collaboration is highly complex. Research has shown that more than 50% of the collaborative efforts are unsuccessful (Harrigan, 1985; Littler et al., 1995). Apparently, managers meet problems that are different from the ones they are used to. Until now, little is known yet of the problems managers of collaboration between clients and suppliers in product development may encounter.

Much is written about the perceived advantages of collaboration. In addition, much attention is devoted to the support information and communication technology

* Corresponding author. Tel.: +31-534893736/3480; fax: +31-534892159.

E-mail address: p.m.wognum@sms.utwente.nl (P.M. Wognum).

(ICT) may provide to collaborative product development between geographically dispersed sites. In this paper, these issues will be addressed too. However, the main focus will be on problem areas in management of collaborative product development between client and supplier.

The research reported in this paper can be characterised as empirical research. Information has been gathered to gain insight into recurring problems and the organisational changes necessary to solve them. The research consisted of two steps. A first impression of the new strategy has been developed based on interviews with managers and product development engineers at Lockheed Martin, Ford, Chrysler, and General Motors in the United States of America. Second, three Dutch companies have been visited to further investigate the consequences of collaboration in product development for daily practice. In this step, semi-structured interviews have been held with managers, project leaders, product development engineers, and purchase and sales managers. They have been asked about their experience with realising the changes in the product development strategy. The second research step is reported on in this paper.

2. Management of collaboration in product development

Compared to the situation a number of years ago, the role of suppliers seems to change to a large extent. Based on the literature and our first explorations in the USA, the most important changes will be described below.

1. Increased added value

Suppliers change from merely producing parts ('jobbers') to also developing them. In this way, the added value of products delivered to clients increases. At the same time, clients started to request their suppliers to deliver not only parts but complete (sub)systems, which have even larger added value.

2. Longer-lasting collaborative relationships

Traditionally, one-year or two-year contracts are needed for the production and delivery of parts. After the contract has finished, negotiation with suppliers is needed again for each new contract. In this way, it is possible that more than one supplier is involved in the production of a part during the lifecycle of a product. In collaborative product development collaborative relationships last longer. Firstly, suppliers are involved in a new product development project already during the design phase. Secondly, suppliers cannot be replaced easily due to the complexity of the order. As a consequence, collaborative relationships are built for the duration of the lifecycle of a product.

3. Larger mutual dependency

Since the production of parts according to client specifications is relatively simple, the number of suppliers in this category (jobbers) is fairly large. Jobbers strongly depend on their client. Conversely, the client has a strong power position over its jobbers. By contrast, since suppliers can offer greater added value and longer-term collaborative relationships are built the client has become more dependent on the knowledge, continuity, and care of the selected suppliers. As such, in the new strategy, clients and suppliers have become more mutually dependent.

The changes mentioned above have large consequences for the collaborative relationship between parties. Traditionally, in cases of asymmetric balance of power the most powerful party, often the client, imposes requirements to the other party [see Fig. 1(a)]. In the new strategy, because of increasing equivalence, both parties can attach conditions to the collaboration. Management of collaboration no longer means that one party tries to use, influence, or control the other party, but, instead, that the relationship between client and supplier is the central aspect [see Fig. 1(b)] (Lamming, 1996). To an increasing extent, a win-win situation for both parties will be pursued.

The changing client-supplier relationship, as described in the literature, concerns for a large part the automotive industry (see e.g., Womack et al., 1990; Helper, 1991). For example, Helper distinguishes two types of relationships. In the so-called 'exit' relationship a client organisation having a problem with its supplier searches for a new supplier. By contrast, in a 'voice' relationship, a client collaborates with its supplier to try to solve the problems. Based on research, Helper has characterised the client-supplier relationships before

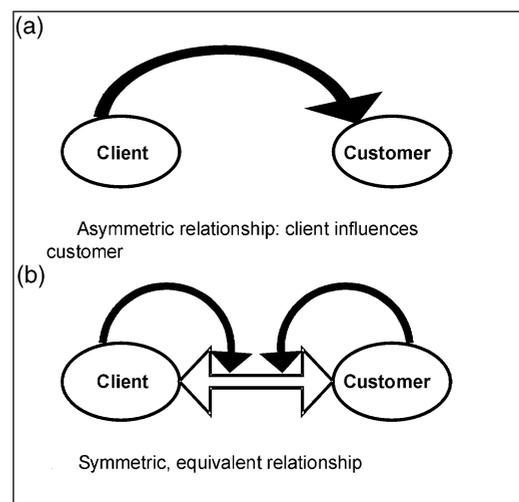


Fig. 1. Differences in client-supplier relationships.

متن کامل مقاله

دریافت فوری ←

ISIArticles

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