

Supply-chain pricing—A new perspective on pricing in industrial markets

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Received 8 March 2005; received in revised form 22 July 2005; accepted 2 August 2005

Available online 26 September 2005

Abstract

There is growing recognition that collaborative business relationships within the supply chain provide interesting opportunities for mutually increased benefit. However, while efforts on improving collaboration within the supply chain are indeed already widespread in some aspects of goods and services—for example, many manufacturers integrate their logistics function with those of their suppliers—such efforts are lacking when it comes to pricing. In contrast to the predominant position of pricing in most industries, the following article will investigate the opportunities for suppliers and customers to collaborate on pricing in order to establish mutually beneficial relationships. The article will demonstrate that this goal can only be attained when price is no longer regarded as an *ex ante* distributive parameter between market partners, but as a joint tool for outcome optimization within the overall supply chain process. We will clarify this new perspective with a calculation example and point out managerial implications for practical implementation.

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Keywords: Supply chain management; Supply chain pricing; Business relationships; Pricing; Open-book; Trust

1. Introduction

Changes in competition (globalization, standardization in production and so on) have recently led to many businesses cutting production in order to focus on key competencies. Thus, an even larger portion of value added is subcontracted resulting in significant expansion in the supply chain in many industrial markets. While this trend has brought benefits in that businesses have been able to concentrate on their strengths and focus their main assets in specific areas, this strategic orientation also has increased the need to collaborate and integrate activities between the different companies in the supply chain. Therefore, most companies today try to establish relationships with their partners in the supply chain rather than concentrating on purchasing (Cannon & Perreault, 1999; Narayandas & Rangan, 2004). This development is further supported by today's business relationships offering one of the most effective remaining opportunities for significant cost reduction and value improvement (Christopher & Gattorna, 2005). However, Frazier, Spekman Robert, and O'Neal Charles (1988) observes that these opportunities mainly depend on the *closeness* of the relationship.

In this sense, suppliers in particular have cultivated business relationships for years by investing in their customers with a view to safeguarding subsequent business dealings from out suppliers (Jackson, 1985). However, there comes a point where making business relationships closer is only possible when both the supplier and the customer are prepared to invest in this special type of collaboration, as relationships in which the reason for staying in are solely determined by investments made on the part of the supplier are unstable by their very nature. As soon as competitors offer comprehensive benefits in alternative business transactions, there is an economic reason for customers to switch suppliers (Bonner & Calantone, 2005). This means that further investments will only become financially viable from the supplier's point of view if the customer is also prepared to put himself into a position of some dependence on the supplier. Both transaction partners then may devolve their economic welfare, at least in part, to the conduct of the other partner.

Accordingly, we distinguish two kinds of business relationship in this paper; on the one hand, business relationships in which suppliers invest in customers in order to create switching costs to prevent customers from changing supplier, to which we refer as *wide business relationships* (Rokkan, Heide, & Wathne, 2003), and on the other hand, business relationships in which both supplier and customer invest in each other with a

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view to making the business relationship closer, which we will call *partnerships* or *close business relationships*.

The essence of *close business relationships* or *partnerships* manifests itself in practically all aspects of commercial activity. Against this background, sellers try to induce and use customers' investment activity as a means of creating switching costs with a variety of different tools (Jackson, 1985). However, efforts on building up partnerships based on reciprocal specific investments are indeed still mainly concentrated on particular aspects of goods and services; for example, efforts are aimed towards collaborative research and development and to the inclusion of customers in the production process, but not to pricing-related issues. Interestingly, the few relationship tools that do exist in that area still rely on the traditional wide-relationship perspective by only implying specific investments on the seller's side. Thus, pricing continues to represent a distribution parameter within a transaction rather than being regarded as a collaborative process. Pricing practices thus are often still tactical and short-term in nature (Anderson & Narus, 2004).

However, this view is becoming increasingly dangerous for many industrial goods—markets, considering the important role that price plays as a marketing tool. Whilst trends toward price competition may not be universal, there can be no doubt that most industrial markets are more price-driven than they were a decade ago. One reason for this development is certainly market globalization, while increasing similarity in services offered by competitors also plays a major role.

In contrast to the predominant position of pricing in most industries, Chapter 2 will address the key question—do suppliers and customers also have the opportunity to develop *partnerships* in pricing? We will demonstrate that traditional pricing tools only offer limited scope for developing partnerships in order to shift attention towards a more co-operative view of pricing in Chapter 3. We will also show that *close business relationships* can only be developed in pricing when the price is regarded as a joint tool for outcome optimization within the overall supply chain process rather than as an *ex ante* distributive parameter between market partners. In order to clarify our envisaged shift in the understanding of pricing, we will then introduce what is referred to as *supply-chain pricing* as a new conceptual approach, which we will illustrate with a calculation example. Here, we investigate the basic actions required, the benefits as well as the limitations, and suggest some managerial implications for its practical implementation. The article will end with a short conclusion in Chapter 4.

2. Building partnerships with traditional pricing

Research into methods used to develop partnerships between suppliers and manufacturers to date have mostly been focussed on the subject of services and goods, as we have already mentioned. Here, there are clearly fewer findings related to spin-off benefits that therefore explore the possibilities for using pricing to do this. One major reason for this is certainly the fact that most industrial companies still separately calculate their optimal price aspirations based on internal cost

structures and dynamics before entering price negotiations with their transaction partners (Garda, 1984). Moreover, they arm themselves with comparison data and draw on tools such as price analysis in order to bolster their own bargaining position without seeking creative and non-obvious solutions in advance to meet the goals of both sides (Anderson & Narus, 2004). Under these circumstances, it only seems clear that price is hardly regarded as a possible relationship tool that may generate mutual benefit.

However, examining pricing policy in detail will reveal that there are at least some starting points for encouraging business relationships. One obvious approach would be to use any kind of price discrimination to initiate relationships; sellers frequently give their customers special price offers (for example, discounts on the first purchase) and thus invest in their buyers (for an overview of price discrimination issue, see also Philips, 1983; Varian, 1989; Wilson, 1993). Moreover, sellers also try to involve their customers in the relationship by using appropriate price mechanisms (for example, contract agreements) (Seshadri, 2004). The strategy is always the same. The seller brings specific investments (such as price reductions) into the transaction, which may transform business transactions from relatively isolated events to a *series* of steady, sustained interactions over the course of time.

However, the duration of these interactions is highly arguable. This one-sided character of specific investments raises the question what type of investment the customer brings into the transaction in order to extend the duration of the interaction, and thus to build up and enhance the stability of a close business relationship. Even if one argues that the customer, for example, makes some sort of time-related investment by entering into a fixed term contract agreement with a supplier and thus taking on a commitment to make so many purchases from this supplier over a certain period of time, or possibly making a quantity-related investment by agreeing to make a fixed minimum quantity of purchases, all of these customer-related commitments do not imply switching costs on the buyer's side, and thus cannot be considered as specific investments in terms of our *close* relationship perspective discussed before. On the one hand, these agreements do not go beyond declarations of intent, nor are they related to true specific investment, and thus always give the buyer some kind of exit option from the relationship. On the other hand, they only occur between a series of overlapping transactions and not within one single business transaction. The supplier thus does not come to regard the customer-related investments as a source of security to awaken trust in a long-term relationship or to make further investments in the customer.

To summarise, the first point is that traditional pricing policies only offer an initial opportunity for forming business relationships due to the one-sided character of the specific investments required. In this sense, the pricing policies discussed largely still imply distributive bargaining elements due to win–lose negotiation settings with the “value pie” of the transaction fixed in size. Moreover, as far as relationship pricing tools are concerned, buyers always focus their efforts on a *series of overlapping transactions* to develop a

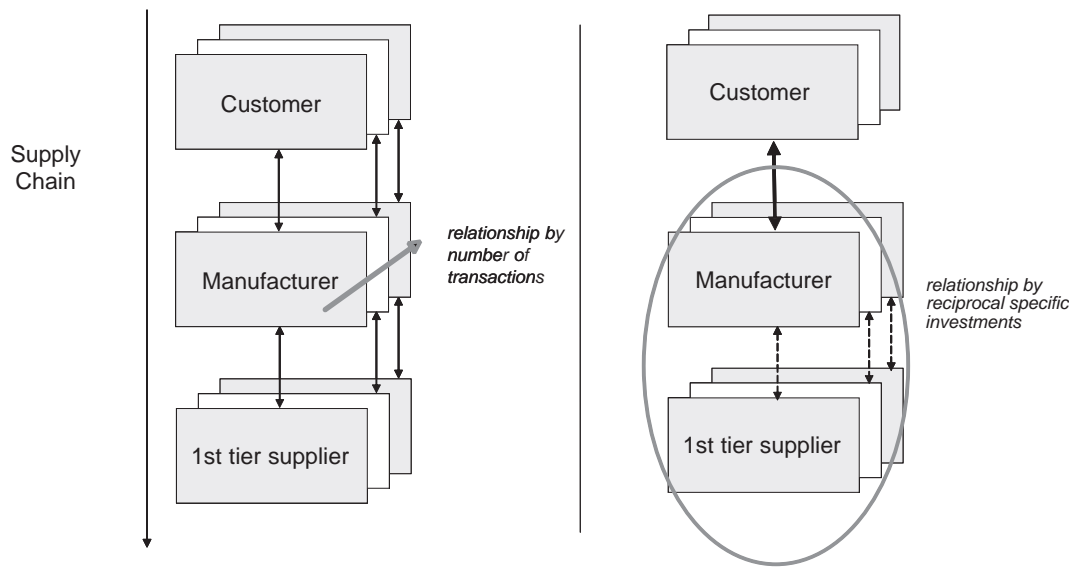


Fig. 1. Shift of attention: from the traditional towards the collaborative pricing perspective.

relationship as the supplier tries to bind its customer by setting buying incentives for future transactions. Against this background, traditional pricing mechanisms are hardly capable of developing partnerships between buyers and sellers in the context of a *single transaction*, an aspect that is especially important for the establishment of reciprocal high switching costs and the resulting stability in the ongoing relationship.

This is due, among other factors, to the function that the price still exerts within an industrial relationship. As mentioned before, it still provides a distribution parameter between the components in the supply chain. As a gain on one side is always related to a loss on the other, the final price constitutes the individual negotiation success for both parties rather than the outcome of a collaborative process in which the parties involved bind themselves to each other. If, however, partnerships should also be developed through specific investments in single transactions, then price must be given another function within the buyer–seller relationship—it must be regarded as a *collaborative tool* for increasing joint profit. Developing collaborative processes in pricing should also be seen as a necessity (cf. Fig. 1) in the same way as today’s industrial markets need to collaborate on logistics, purchasing and production in order to optimise joint outcome. This shift in pricing policy may also be seen as a possible solution to tackle the problem of double marginalisation, as some stages of supply-chain pricing will be combined, reducing opportunities of adding any additional margin (see also Moorthy, 1988 on the problem of double marginalisation).

3. The concept of supply-chain pricing

3.1. From supply chain management to supply-chain pricing

Today’s necessity to collaborate on activities in multiple areas of the supply chain such as production and logistics is a result of the prolongation of industrial supply chains as discussed at the beginning of this article. The concept of

defining an overall approach and systematically managing the subsequent stages in the supply chain has been condensed into the term *supply-chain management* (SCM) in the last 20 years. As the concept purports to have global relevance, Handfield and Nichols (1999, 2) have made the following definition: “The supply chain encompasses *all* activities associated with the flow and transformation of goods from raw material stage to the end user. Supply-chain management is the integration of these activities through improved relationships, to achieve a sustainable competitive advantage.”

This definition reveals that value in the supply chain is created sequentially through a series of stages. Developing and producing a product is one type of value creation, pricing and selling it is another or—keeping the actual relevance of industrial pricing in mind—maybe the most important aspect of value creation (Gummesson, 2004). It therefore only seems obvious that co-ordinating the supply chain should not just involve issues relating to the coordination of information and goods. Instead, there should be growing recognition that effective supply chain management also needs new pricing strategies in order to provide opportunities for increased profits (Christopher & Gattorna, 2005). In other words, if both the customer and the supplier are part of the same value-creating process, the traditional role of price must be altered: “This means that both profits and losses. . . should be shared between supplier and customer. Instead of profit-distribution, pricing becomes a question of remuneration for participation in the creation of value” (Wikström & Normann, 1994, 64). Therefore, the next chapter will be an initial attempt at developing what would be referred to as *supply-chain pricing* (SCP) to contribute to a more comprehensive approach of SCM on the one hand, and to develop close relationships on pricing on the other.

3.2. Using supply-chain pricing to increase profit

SCP is based on the key ideas of vertical pricing. Sellers (suppliers) and buyers (manufacturers) first abstain from trying

to optimize their own positions in order to achieve an optimum which is in the interests of all components in the chain. After that, they must distribute the profit made across all parties involved in the chain. To be specific, the supplier will initially abstain from value-added component-based pricing, instead allowing the manufacturer an insight into process-related cost structures—*open-book costing*. By making costs transparent, all associated businesses establish the means to make a joint profit while setting a maximum-profit price. In most cases, this will achieve a higher overall market profit than when individual businesses try to optimize their own interests at the pricing stage. The following example helps to shed light on the general validity of this point.

Assume in the following example that a manufacturer sees himself facing a certain price–market function in its own market, and that manufacturer and supplier operate open-book costing to optimize their joint market result; for joint gross margin, see function (1). In the following function, we have already integrated the specific investments (*c*) necessary for establishing supply-chain pricing in order to allow a realistic comparison of supply-chain pricing with the traditional forms of non-collaborative pricing.

$$GM_{\text{joint}} = p(a - bp) - (k_m + k_s)(a - bp) - c \tag{1}$$

- $(a - bp) = x$ —price/sales-function
- k_m —variable unit costs of manufacturer
- k_s —variable unit costs of supplier
- p —manufacturer’s price
- c —fixed transaction costs

By differentiating the profit function according to the desired market price (p), the price for maximal gross margin is as follows:

$$p_{\text{opt,joint}} = \frac{a + bk_m + bk_s}{2b} \tag{2}$$

This leads us to the maximum gross margin for all components in the supply chain.

$$GM_{\text{max,joint}} = \frac{(a - bk_m - bk_s)^2}{4b} - c \tag{3}$$

The benefit of a team-based approach to pricing is self-evident when the gross margin obtained is compared with component-based price optimisation. To simplify matters, assume that all parties involved have access to all information, and that both business associates operate rationally in order to maximise gross margin. The total gross margin obtained in the supply chain is now produced by combining the individual gross margins of supplier and manufacturer.

$$GM_{\text{component-based(manufacturer)}} = p(a - bp) - (k_m + p_s)(a - bp)$$

$$GM_{\text{component-based(supplier)}} = p_s(a - bp^*) - k_s(a - bp^*)$$

$$GM_{\text{component-based}} = GM_{\text{component-based(manufacturer)}} + GM_{\text{component-based(supplier)}} \tag{4}$$

In addition to:

- p_s —supplier’s price
- $p^*_{\text{manufacturer}}$ —manufacturer’s optimal sale price

As we have assumed that the supplier is aware of the manufacturer’s gross margin, the supplier is able to calculate the manufacturer’s optimal sale price (p^*). The supplier can then use this information to optimise its own profit so that it can also reach an optimal price (supplier’s optimal price).

$$p^*_{\text{manufacturer}} = \frac{a + bk_m + bp_s}{2b} \tag{5}$$

$$p^*_{\text{supplier}} = \frac{a - bk_m + bk_s}{2b} \tag{6}$$

These independently optimised prices are applied as stated to the formula for calculating gross margin:

$$GM_{\text{max.component-based}} = \frac{3(a - bk_m - bk_s)^2}{16b} \tag{7}$$

The process of establishing the difference in gross margins with component-based and joint pricing yields clear evidence for the benefits of supply-chain pricing:

$$GM_{\text{difference}} = GM_{\text{max,joint}} - GM_{\text{max.component-based}} = \frac{(a - bk_m - bk_s)^2}{16b} - c \tag{8}$$

The superiority of joint pricing compared to component-based pricing methods is still applicable if—in the absence of a complete set of information—different businesses instead choose to set their prices independently, for example by using cost-plus pricing. This involves the supplier calculating a profit margin in working out its pricing by adding this to its variable unit costs (P_s). The manufacturer then optimises its profit. If we compare this to the way in which the maximum gross margin is calculated in joint pricing, the gross margin in cost-plus pricing can be calculated as follows:

$$p_s = (1 + m)k_s \tag{9}$$

In addition to:

- m —the supplier’s calculated gross margin

$$GM_{\text{max.cost-plus}} = \frac{(a - bk_m - b(1 + m)k_s)^2}{4b}$$

As soon as the supplier has set its profit margin ($m > 0$), a positive value emerges from the difference between the maximum joint gross margin (excluding the cost of Implementation c) and the maximum gross margin based on the cost-plus method. This may again underline the advantages of the collaborative pricing method in SCP. They can also be highlighted by the following illustration in diagram 1.

Fig. 2 clearly illustrates that only the profit maximisation with cost-plus pricing is dependent on supplier’s margin (cf. Eq. (9)), while both other pricing methods result in a horizontal

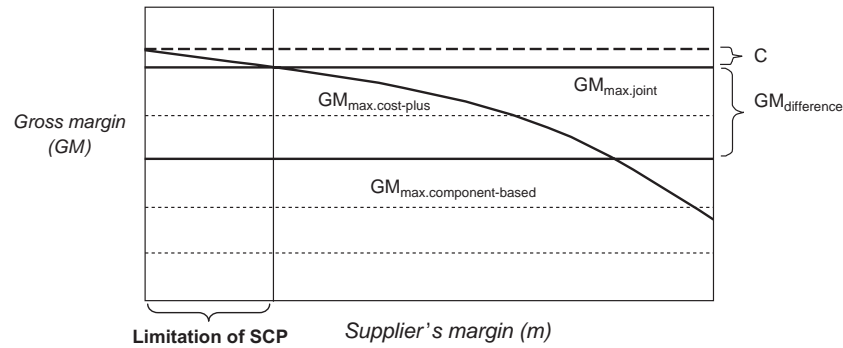


Fig. 2. Example of the benefits of supply-chain pricing.

function since no margin is included (cf. Eqs. (3) and (7)). Thus, the diagram not only highlights the advantage of profit maximisation with SCP as already discussed, but also reveals one limitation in our approach by demonstrating that the overall advantage of SCP should be critically proven for every single relationship, as there may be situations—especially in markets with low suppliers' margins—where the joint gross margin of cost-plus pricing lies above the profit of our approach due to the specific investments needed for its practical implementation (for further details, see chapter 3.3). Keeping in mind, however, that SCP is aimed at establishing a *close* and thus *long-term* relationship this limitation must not be given too much weight, as the envisaged time horizon usually entails the amortization of the starting investments. Since SCP will therefore mostly result in higher joint gross margins than the margins that the parties could realise with the more isolated approaches towards price setting already discussed, the original fixed pie can be expanded to benefit both parties. Thus, SCP can also be seen as a tool to turn the usual win–lose character of industrial price negotiations (cf. chapter 2) into win–win bargaining situations (Anderson & Narus, 2004). For this reason, we see a clear opportunity in applying SCP not only for increasing joint profit but also for cultivating close business relationships.

Nevertheless, we also have to admit that our approach towards a more collaborative perspective on pricing within supply chains will only display a true win–win situation if the supplier subsequent to the collaborative profit maximisation is engaged in the profits made by the manufacturer. This means that the supplier will safeguard a sales price exceeding any margin it would have made if it had fixed its pricing independently. Thus, SCP must clearly operate on two levels.

- The first step is to determine the price–quantity combination to maximize profit.
- The second step is to allocate the results among the interested parties. This is where the practical problems of applying SCP come into play, and this is what we will now go on to investigate.

3.3. Problems of implementation

SCP implies collaboration among all interested parties for enhancing profit across all levels of the value-added chain.

However, in practice, the phenomenon of hold-up (for detailed explanation see Williamson, 1985), one of the most driving sources of problems in transactions between participating interests, must also be considered in our approach. The hold-up problem describes—in the example on hand—the situation where joint maximum gross margin can be made, if the supplier (A) and the manufacturer (B) work together, and both consider an agreement to do so after A has abstained from setting a supplier's margin. The hold-up problem occurs since after joint profit maximization, A will have the power to demand a larger share of the profits than before the agreement, since A is now deeply invested in the project due to its open-book policy, while A is not. This gives A some bargaining power that was not there before the investment. In fact, A can demand all the profits since A's alternative is to lose the supply relationship entirely. From this, it may be followed that SCP makes it difficult to ensure fair distribution of the optimized gross margin among the parties engaged in the contract. A possible "fair" approach to sharing profits could however be achieved when the costs incurred by both parties are designated as a basis for distribution and the "weaker link" can therefore claim the profit to which it is entitled. Keeping in mind, however, that the information on costs incurred by the respective other party are incomplete, this solution is also riddled with problems (Güth & Tietz, 1990)—it could give the parties an incentive to act opportunistically by declaring exaggerated costs and thus siphoning off additional profit (Murnighan, Babcock, Thompson, & Pillutla, 1999). This conflict constitutes a well-known phenomenon of collaborative games, which can also be demonstrated by the 'prisoner's dilemma'.

Transferred to the case on hand, this may illustrate the situation in which a game of complete cooperation leads to profit maximization within the whole supply chain (both parties +5), while at the same time not ending up with optimized outcomes for the single parties (both could reach +6, when they exaggerate their costs while the other side plays fair). Thus, both parties dispose of any motive to indicate exaggerated costs within the joint price calculation to maximise their own share of profit, but at the same time, they are also at risk of realising only a minor share of profit in the case that the other party is also concealing its true costs (both only +1). As a consequence, the optimal theoretical solution is unstable (cf. Table 1).

Table 1
The prisoner's dilemma in SCP

	Fair play—open book	Unfair play—exaggerating cost
Fair play—open book	5	6
Unfair play—exaggerating cost	0	1
	5	0
	6	1

However, this type of conflict only arises in circumstances where SCP is applied to operational transactions, thus playing a single game, without being embedded in its intended long-term perspective. In this case, we have to play a repeated game, as it best symbolizes relationships in which the optimal solution of SCP may be regarded as stable. Since both players are now aware that if they once indicate exaggerated costs, their counterpart will do the same in the following round, which in total will lead them to a lower outcome than in the case of playing fair from the beginning on (example for two rounds: +7 versus +10), both parties would choose to play fair and open up their books.

As shown above, opportunistic behavior should not be observed in situations where SCP is applied with its intended long-term perspective. However, the previous illustrations also indicate that companies should nevertheless consider some managerial implications when putting the new pricing perspective into practice. Like the ingredients of successful SCM, these fall into two categories—"hard" and "soft".

3.4. Managerial implications

3.4.1. "Hard" ingredients for success

"Hard" ingredients for success include all practicable preconditions for implementation. These can be put in place by undertaking appropriate procedures and investment. With regard to SCP, the application of the following ingredients for success is pertinent.

- On the basis of our understanding of the way in which SCP is implemented, the first ingredient for success lies in identifying key relevant costs. *Agreements* then need to be made regarding the type of costs the parties involved are allowed to incur in the collaborative project, and how these are to be determined. In particular, if the later division of profits takes place on the basis of the size of these costs, the importance of a detailed system in place for determining, distributing and assessing the costs is clear. In practice, collaborating on setting up a *cost book* in which the pricing partners can record their accounts would be advisable. At the same time, this would provide a means of risk allocation for all parties involved (Triantis, 2000).
- Once a proper system for managing costs is in place, there are other issues related to the distribution of profit made by the manufacturer. Even if cost-based profit or distribution of gross margin seems practicable and fair to all parties involved, there are situations that require detailed agreements; for example, collaboration may not produce the

surpluses envisaged (such as due to increased costs incurred by individual partners in the collaborative project), leading to losses incurred by individual parties. In this case, there is a need for effective procedures to cover such eventualities and set the limits for collaborative partners for any business risk that they incur. In practical terms, it may be helpful to *provide examples* beforehand that may be used for monitoring compliance with contracts and for the purpose of mediating in the event of dispute (Miano, 2004).

- Another essential ingredient for success is to ensure that the operating systems for SCP are properly mapped out. In this way, SCP constitutes a strategic starting point. At the same time, the decision for SCP brings about a lasting change in the general way that pricing is managed. Whereas the partners in the collaboration have been working in isolation and with their own data up to now, they are now part of a network that they are also responsible for managing. This implies a clear need for information and communication infrastructures (Wuyts, Stremersch, van den Bulte, & Franses, 2004) to ensure that the collaboration partners are in constant contact with one another and—a factor which should not be underestimated—are able to monitor and control the entire supply chain from any point in the value-added chain. In practice, investments in the *system architecture* and *shared control* of all interested parties constitute a further, crucial factor for success (Liu, Zhang, & Hu, 2005).
- Finally, difficulties may obviously also arise as a result of inadequate *total project management*. Lack of clarity regarding tasks, competencies and responsibilities will result in inefficiency and make it difficult for the necessary interface management to deal with SCP.

3.4.2. "Soft" ingredients for success

In contrast to hard ingredients for success, all those issues relating to employment, motivation and behaviour of those engaged in pricing responsibilities come under "soft ingredients for success"—staff and management on the part of suppliers and manufacturers. The following ingredients for success, in particular, appear to have relevance to SCP.

- An obvious basic pre-condition is that collaborative pricing is only possible with designated suppliers of a particular category of product. Understandably, the inner circle in open-book negotiations must maintain a *restricted membership*. However, this means that most traditional purchasing policies must be abandoned or adapted (Sriram, Krapfel, & Spekman, 1992). They generally follow multiple sourcing strategies as they aim to diversify risks. It is also apparent in this case that an allegiance to SCP is in no way an isolated marketing decision, but has repercussions on countless areas of business. Those who use SCP are well advised to make changes in pricing strategy the responsibility of *senior management*.
- An outward-looking collaborative partnership goes hand in hand with this internal process of re-evaluation. Here, structures will also presumably be dismantled and redefined.

In particular, having to exchange information relating to business results requires absolute *transparency* and *trust*, which will form the basis for successful and productive collaboration. Handfield & Bechtel, 2002; Quinn, 2004 even observes: “Underpinning all successful relationships, whether they be external or internal, is trust”. The parties involved must be able to assume that a partner is not taking advantage of every available situation for its own ends, and is also willing to hand over at least partial control to other partners (Izquierdo, 2004). Here, it must be noted that the extent and depth of trust largely depend on the business culture. It can therefore be assumed that those companies that have a cultural match, meaning those companies that stand out as having similar standards and values make a suitable partnership for SCP.

In recent years, the motor industry in particular has recognised that making OEM supplier business relationships significantly closer is necessary on the one hand—for example, in order to meet the massive cost pressures that result from cuts in development cycles and growth in international competition; on the other hand, however, this is only possible when both suppliers and manufacturers trust the other side of the market. In this sense, studies reveal that although 69% of manufacturers and 66% of suppliers are aiming at intensifying their collaboration, the most of their supply-chain relationships underachieve since mistrust in the will to collaborate still haunts the motor industry. This certainly results in the overriding dominance that many OEMs exert over their suppliers, which has resulted in OEMs often managing to secure a large position of the profits and transferring only a small portion to the suppliers, therefore reducing the willingness of suppliers to deepen their involvement in close relationships. Consequently, manufacturers and suppliers have only just started on closer cooperation, for example in co-ordinating production processes or optimising delivery, but still have not directed any of their attention to collaboration pricing.

However, there are at least few motor companies that appear to have finally recognised the advantages of treating their suppliers as trustful partners and are thus aware of the potentials of price optimisation across the supply chain. At Harley Davidson, open-book pricing is established right from the starting point of a business relationship (Kobe, 2002). Accordingly, suppliers are asked to provide detailed cost breakdowns for every transaction. This pricing concept works, as Harley Davidson treats its suppliers the same way it treats members of its internal organisation, with the emphasis on trust. Consequently, the suppliers can be sure that the company is not interested in squeezing them on margins, but aims at generating mutually beneficial value in a long-term relationship. In this sense, Harley Davidson’s suppliers also have the opportunity of negotiating for relief when needed (Kobe, 2002). Finally, the company’s success curve should inspire the other automakers towards establishing genuinely close relationships with their supply-chain partners.

4. Conclusion

In discussing SCP, we were aiming at a shift of attention towards a more collaborative view of pricing. In this sense, SCP no longer sees price as a basis of distribution between business associates but as an opportunity for maximising gross margin and profit, thus realising mutual benefits. Like every new operating perspective, SCP raises the question of what type of business situations should be best applied, aside the problems of practical implementation and ingredients of success. One might easily conclude that collaborative pricing is especially recommendable for long-established relationships. We would argue, however, that SCP should only be introduced in new transaction processes and thus at the very beginning of a business relationship. As SCP aims at open books, possible unfair play in the past may come to the fore, even endangering the future maintenance of satisfied and profitable relationships. This is why we recommend that only new business projects aimed at improving results by developing business relationships should take into future consideration the option of partnership pricing; established ones, however, should keep to their traditional practices.

Moreover, we would like to indicate one further problem of SCP that becomes evident where more than two parties are collaborating in the supply chain. As Coughlan and Wernerfelt (1989) point out, the widespread assumption that all intra-channel agreements are observable is not valid in reality, and that there are credible guarantees that observable agreements must be considered as possible. This possible intransparency situation, however, gives rise to mistrust within the whole supply chain, as one party never can be sure if two others are collaborating in the form of SCP and thus expanding their profit on its own costs. It only seems clear that this mutual mistrust foils the willingness to change to a more collaborative pricing strategy.

Finally, companies must be aware that SCP will only provide a clear competitive advantage for the period of time when the competitors not yet have adapted to the new perspective. Taking the situation into consideration where a market or branch has completely switched into SCP, the use of our concept will no longer dispose of our stated overall advantage. In this situation, it can surely amount to nothing more than the prevention of competitive disadvantage.

References

- Anderson, J. C., & Narus, J. A. (2004). *Business market management: Understanding, creating, and delivering value*. Upper Saddle River: Pearson Prentice Hall.
- Bonner, J. M., & Calantone, R. J. (2005). Buyer attentiveness in buyer–supplier relationships. *Industrial Marketing Management*, 34(1), 53–62.
- Cannon, J. P., & Perreault, Jr., W. D. (1999, November). Buyer–seller relationships in business markets. *Journal of Marketing Research*, 36, 439–460.
- Christopher, M., & Gattorna, J. (2005). Supply chain cost management and value-based pricing. *Industrial Marketing Management*, 34, 115–121.
- Coughlan, A., & Wernerfelt, B. (1989). On credible delegation by oligopolists: A discussion of distribution channel management. *Management Science*, 35(2), 226–239.

- Frazier, G. L., Spekman, R., & O'Neal, C. (1988, October). Just-in-time exchange relationships in industrial markets. *Journal of Marketing*, 52(4), 52–67.
- Garda, R. A. (1984). Industrial pricing: Strategy vs. tactics. *The McKinsey Quarterly*, winter 1984, 49–63.
- Gummesson, E. (2004). Return of relationships (ROR): The value of relationship marketing and CRM in business-to-business contexts. *Journal of Business and Industrial Marketing*, 19(2), 136–149.
- Güth, W., & Tietz, R. (1990). Ultimatum bargaining behaviour. *Journal of Economic Psychology*, 11(3), 417–449.
- Handfield, R. B., & Bechtel, C. (2002). The role of trust and relationship structure in improving supply chain responsiveness. *Industrial Marketing Management*, 31(4), 367–383.
- Handfield, R. B., & Nichols, E. L. (1999). *Introduction to supply chain management*. Prentice Hall.
- Izquierdo, C. (2004). The interaction of dependence and trust in long-term industrial relationship. *European Journal of Marketing*, 38(8), 974–995.
- Jackson, B. (1985). *Winning and keeping industrial customers*. Toronto: Lexington Books.
- Kobe, G. (2002, June). Cost choppers. *Automotive Industries*, 182(6), 30–33.
- Liu, J., Zhang, S., & Hu, J. (2005). A case study of an inter-enterprise workflow-supported supply chain management system. *Information and Management*, 42(3), 441–455.
- Miano, A. M. (2004). Price diversion: Challenge for supply chain pros. *Supply Chain Management Review*, 8(8), 11–12.
- Moorthy, K. S. (1988). Strategic decentralization in channels. *Marketing Science*, 7(4), 335–355.
- Murnighan, J. K., Babcock, L., Thompson, L., & Pillutla, M. (1999). The information dilemma in negotiations: Effects of experience, incentives, and integrative potential. *International Journal of Conflict Management*, 10(4), 313–340.
- Narayandas, D., & Rangan, V. K. (2004, July). Building and sustaining buyer–seller relationships in mature industrial markets. *Journal of Marketing*, 68(3), 63–77.
- Philips, L. (1983). *The economics of price discrimination*. Cambridge: Cambridge University Press.
- Quinn, F. (2004). On relationships. *Supply Chain Management Review*, 8(2), 5.
- Rokkan, A. I., Heide, J. B., & Wathne, K. H. (2003). Specific investments in marketing relationships: Expropriation and bonding effects. *Journal of Marketing Research*, 40(2), 210–225.
- Seshadri, S. (2004). Relationship marketing and contract theory. *Industrial Marketing Management*, 33(6), 513–527.
- Sriram, V., Krapfel, R., & Spekman, R. (1992). Antecedents to buyer–seller collaboration: An analysis from the buyer's perspective. *Journal of Business Research*, 25(4), 303–320.
- Triantis, G. G. (2000). Unforeseen contingencies: Risk allocation in contracts. *Encyclopedia of Law and Economics*, 3, 100–116.
- Varian, H. R. (1989). Price discrimination. *The handbook of industrial organisation* (pp. 604–631). Amsterdam: Schmalensee, R., Willig, R.D.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. New York: Free Press.
- Wilson, R. (1993). *Nonlinear pricing*. Oxford: Oxford University Press.
- Wikström, S., & Normann, R. (1994). *Knowledge and value*. London: Routledge.
- Wuyts, S., Stremersch, S., van den Bulte, C., & Franses, P. H. (2004). Vertical marketing systems for complex products: A triadic perspective. *Journal of Marketing Research*, 41(4), 479–488.

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