The Outstanding Supplier: Buyers' Perception of Good Supplier Performance

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Abstract

Formalized supplier evaluations has become more widespread where the use of formalized evaluation systems creates a holistic and consistent assessment of suppliers. This paper presents how evaluation systems are used in practice and what role individual judgements of buyers play. Two in-depth case studies are conducted. It is concluded that formal supplier evaluation systems only give some of the picture with regard to how assessments are conducted in reality.

INTRODUCTION

In the 1990's, the quality and performance measurement wave had a tremendous impact on how companies perceived quality and measurement (Hines, 1994). In many industrial companies, the implementation of TQM and ISO standards had a major consequence on the way in which suppliers were measured. For example, as a part of the ISO certification system, it is required that evaluation systems are formalized. One consequence of this formalization was that evaluation criteria became more explicit than they had previously been. Another was that some of the knowledge, which had previously been tacit, became explicit. In general, the formalization made it clearer and more obvious, at least to some extent, what was important for good performance. Seen from a quality perspective, quality is about the perception of the customer based on research and monitoring of internal and external performance measures (Christopher et al., 1991).

Before the more widespread adoption of formalized supplier performance systems, the individual buyers themselves made the evaluation of supplier performance, and often the individual buyers' judgement was heavily relied upon. Seen from a company perspective, the formalization of the evaluation had several advantages. First of all, evaluation is made easier by applying standardized systems and criteria. Second, comparison was based on similar criteria from one situation to the other. Subjective factors had less impact on the evaluations made.

Individual buyers have not always considered the adoption of more formalized evaluation systems a good innovation. In some firms, buying functions have been reservations with regard to the value of such systems. The evaluation systems have sometimes been described as being too "formalized" or seen as a way of making average judgements that are of limited value. Wagner and Johnson (2004) note that the

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managers they interviewed “favour supplier portfolio management and control systems
that are flexible enough to allow them to react to unanticipated circumstances” (p. 727).

In some supplier relationships, particularly the more important ones, the use of
monitoring and control systems can have hazardous effects. In the more important
supplier relationships, they are often highly individualized and they develop over time.
It is difficult, if not impossible, to put these into a generalized and standardized system.
More important supplier relationships mature with interaction and with the diversity of
the challenges that they face or, as Gadde and Hakansson (2001) wrote, “any attempt
from the buying firm to manage the relationship must take the interest of the supplier
into consideration as well” (p. 148). It is, therefore, more important to understand the
very nature of the different kinds of relationships the firms face than it is to get an
arbitrary figure out of an evaluation system.

Yet another disadvantage of supplier performance systems is that they are too one-sided
by only looking at the value which the buyer profits from the relationship. It is really
more about understanding the dynamics in the relationship, its complexities, its
diversity of values and costs for the collaborating partners over time. According to
Tzokas and Saren (2000) different knowledge is necessary at each stage of a
relationship. If this is the case, supplier evaluation systems must cover both the
particular purpose or type of relationship and the different stages it may be in. As a
consequence, a variety of criteria must be applied not only at each type and stage, but
they must also be individualized with regard to each supplier relationship. The question
that arises then is whether it makes sense to use formalized evaluation systems at all?

Contrary to this, and in accordance with the IQM and measurement approach, it has
been claimed that a supplier evaluation system has the advantage of minimizing the
importance of more subjective factors in the evaluation process (Krause and Ilfram,
1997). It is important to know a supplier’s strengths and weaknesses and why he
performs in a particular manner in specific situations, but by the end of the day, it is
about the actual performance and how it is evaluated by the buyer’s customer. It is
important that the individual buyer knows their suppliers. It is also important to improve
performance by using overall measures in order to send clear signals what is important
and what is not and what needs to be done to improve (Kraljic, 1983; Hahn, Watts and
Kim, 1990).

**AIMS OF THE STUDY**

The purpose of this study is to highlight the factors that are important when
performance measurement of suppliers is undertaken. The following propositions will
therefore be investigated:

Proposition 1: What is seen as good performance depends on the particular use of the
supplier. What is the role of the supplier – standard supplier or developer?

In other words, good performance does depend on the contextual situation. A way to
look at the contextual conditions could be to focus on the tasks the supplier needs to
solve and the extent of dependence between the parties.
Proposition 2: The outstanding supplier is expected to be better at satisfying the needs and wants of the customer in the short run than the average supplier.

This typically means to evaluate the performance of the supplier in a specific period, by evaluating one delivery, measuring quality, observance of delivery time, etc.

Proposition 3: The outstanding supplier is expected to be better at satisfying the needs and wants of the customer in the long run than the average supplier.

In the long term, the evaluation benchmarks will typically be different from the short term evaluation benchmarks. In the long term, the evaluation benchmark will among others, include the supplier’s attitude to collaboration, their change readiness, etc.

By exploring proposition 2 and 3, it will be possible to analyze to which extent the outstanding supplier is perceived and treated differently by the purchaser than the average supplier, which will be an important condition to examine proposition 4.

Proposition 4: If the formal supplier evaluation system does not cover all the positive impacts that the outstanding supplier has on the buyer, the buyer neglects the results from the formal supplier evaluation system.

It appears from proposition 4 that the intention is to cover if, and how, the purchaser deviates from the formal evaluation system.

The paper is organized as follows: First, the paper contains a description and discussion of the central literature for understanding the factors which are at stake within supplier evaluation (a priori theory development). Secondly, we introduce two case studies that, together with the review of literature, are used to identify the most important factors at stake for developing a framework to study the use and consequences of supplier evaluation systems. Thirdly, we elaborate the methodology used for the study and then we describe and explain some overall case results and draw comparisons to the propositions outlined in the beginning of the paper. Finally, the paper contains a conclusion and discussion of the implications of the study.

SUPPLIER EVALUATION: STATE OF THE ART

Employing suppliers has a purpose and the purpose often differs. The type of suppliers used differs and the type of relationship with suppliers differs. The relationship itself is shaped by its purpose. The performance of suppliers is assessed either formally or informally, yet the criteria used for the assessment of suppliers may or may not differ. These statements are the core of the underlying assumptions behind the literature within this field of research (see Lamming, 1993).

Rational choice seems to be the predominant approach for understanding why companies use suppliers. At one end of the scale, this touches upon a well-known discussion within economics about why companies are not solving all tasks themselves, and at the other end of the scale, the question of why a particular supplier is chosen...
rather than another supplier. For the buyer, the choice has to do with the task to be carried out, and therefore the particular choice is about being convinced that the supplier has the necessary capabilities to solve the task in a satisfying manner. However, partner choice is a matter of both availability and of making the right choice, and of the willingness to be chosen. The monadic literature on organizational buyer behaviour (Webster and Wind, 1972; Tanner, 1999; Woodside, 1999) indicates that the choice of suppliers is initiated and made by the buyer. Due to the dyadic literature on buyer-seller relationships (Gadde and Håkansson, 2001; Wilkinson et al., 2003), the formation of supplier relationships is created by interaction by the parties involved. Nevertheless, a way of understanding what type of relationship is useful in a particular situation is offered by the portfolio theory (Christensen et al., 1992; Olsen and Ellram, 1997; Gadde and Håkansson, 2001).

Evaluating, selecting, and assessing suppliers is an intriguing process. As Monczka et al. (2005, p. 207) write: “Most purchasing experts will agree that there is no best way to evaluate and select suppliers; organizations use a variety of different approaches. Regardless of the approach employed, the overall objective of the evaluation process should be to reduce purchase risk and maximize overall value to the purchase.” At the same time, Monczka et al. (2005, p. 269) regard initial evaluation and selection as linked to supplier performance measurement. At the start, the obligations the supplier should live up to are agreed upon, and afterwards, the fulfillment of the obligations is measured on a continuous basis.

Buyers’ perception of suppliers

Measuring supplier performance has gained more and more attention and importance through recent years. Certification of large parts of the industrial sector has clearly influenced the way in which supplier performance measurement is conducted in many companies. As indicated in the propositions above, the aim of this study is to uncover the extent to which buyers use formalized supplier evaluation systems and to what extent other criteria are applied as well in the evaluation of suppliers. Studying this means looking for several factors influencing how supplier performance measurement is actually done.

Figure 1 illustrates the central elements that are used when examining this issue. In the description of the illustration we will also include the formalized supplier evaluation systems because these systems are seen as one of the factors that influence the buyer’s perception of a particular supplier’s performance. As mentioned, the aim is to uncover the extent to which other factors influence this perception, including in particular, the evaluation of the outstanding performance and therefore all factors will be described here, and we will seek to identify each one of them as a part of the total investigation.

The task to be performed

The core activities of the buying centre are the tasks that are to be performed for the company. Thus, the core activities are the products and services which will be sourced externally, and which can satisfy the needs of the buying company. There are several ways in which we can classify the products and services required by the company.
Traditional buying behavior theory classifies buying situations according to the uncertainty experienced: the less knowledge about the need of the company (the product or service required), the greater the uncertainty (Robinson, Farris and Wind, 1967; Webster and Wind, 1972). Hakansson and Wootz (1979) also base their theories on the uncertainty concept. They distinguish between ‘need uncertainty,’ ‘transaction uncertainty,’ and ‘market uncertainty’, where need uncertainty is about answering the question: what particular product or service can satisfy the need of the buying company? Hakansson and Wootz describe it like this: “How responsible decision makers perceive the need and those products which can satisfy the need. These perceptions influence, for example, functional and quality demands, that are made on possible products and hence also on their judgment of potential suppliers” (p. 38).

As shown in Figure 1, the task to be performed is a central element in the interaction model. It is obvious then, in each buying situation, that the aim of the exchange of products/services, information, the financial set-up, and the social contact is to satisfy that need in the best possible way.

A common feature of the theoretical approaches above is that the task to be performed is assumed to have a major impact on the buyer’s perception of the supplier’s performance. The first step to analyze the buyers’ perception of supplier performance is an examination of the task that is to be performed.

**Company external factors**

The product or service also plays a decisive role when it comes to defining the role of different types of sub-suppliers. Christensen et al. (1992; 1998) base their definition of the supplier role on the complexity of the task. It is assumed that the complexity of the task is closely connected to the coordination that is necessary. Basically, the more complex the task, the larger the need for coordination. However, a company can always choose the way in which cooperation should take place. Here, the basis of the typology...
is that different levels of complexity result in different kinds of coordination that need to be addressed. Addressing these tasks happens in close cooperation between seller and buyer (Figure 2).

**Figure 2. Sub-supplier typology**

![Sub-supplier typology diagram]

In the typology, the role of the supplier is connected to different forms of organising the interplay between sub-supplier and buyer. Thus, we have standard delivery, the extended supplier network and partner relationship. From the buyer's point of view, it is assumed that supplier performance is evaluated according to the particular role played by the supplier.

The second step to analyse the buyer's perception of supplier performance is the role of the supplier. This role is determined by the complexity of the task and the need for coordination. Supplier relationships differ, however, even though some suppliers may perform the same tasks. This is because the parties gradually get to know each other and because different kinds of adaptations take place in the process. A number of models describing the central dimensions and phases in such processes have been developed; see for example Gueilliet de Monthoux, 1975; Ford, 1982; Dwyer, Schurr and Oh, 1987. In Ford's model, the central variables describing the relation are experience, uncertainty, distance, investments and commitments and finally adaptations. Basically, it is assumed that, over time, experience is gathered, that uncertainty and distance are reduced and that bonds and adaptation are increased. In each case, the development of the relationship may vary, but Ford's dimensions provide a reasonable starting point for describing dominant dimensions in the development of a relationship. In other words: the buyer's perception of the suppliers performance will be seen in the light of the events that have taken place during the development of the relationship.

Ford (1982) noted that relationships between buyer and seller change over time; likewise Fiocca (1982) has tried to identify central differences in the strength of the relationships. However, the variables described by Fiocca are only to be regarded as indicators and not as unique classification variables (Table 1). According to Fiocca, the
strength of the relationship is an important factor for the way in which the two parties interact.

Table 1. Strength of the buyer-seller relation

<table>
<thead>
<tr>
<th></th>
<th>Strong relation</th>
<th>Weak relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The length of the relation</td>
<td>long</td>
<td>Short</td>
</tr>
<tr>
<td>The customer’s importance</td>
<td>high</td>
<td>Low</td>
</tr>
<tr>
<td>The importance of the partners</td>
<td>high</td>
<td>Low</td>
</tr>
<tr>
<td>Friendship</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Mutual development</td>
<td>yes</td>
<td>No</td>
</tr>
<tr>
<td>Cultural distance</td>
<td>small</td>
<td>Large</td>
</tr>
<tr>
<td>Geographical distance</td>
<td>small</td>
<td>Large</td>
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</tbody>
</table>

(Fiocca, 1982)

The third step to analyse a buyers’ perception of supplier performance is the phase in which the relationship between supplier and buyer is, including the strength of the supplier relationship. Håkansson and Snehota’s (1995) ARA model (Activity, Resource, Actor) enables different kinds of analyses, including a complete network analysis. It is often the case that one supplier relationship can influence other relationships, including performance expectations. Likewise, the network in which the company interacts can also influence individual relationships, for example via the power dependency relationship that exists within the network (Håkansson, 1982).

The fourth step to analyse buyers’ perception of supplier performance is the buyer’s relations to other suppliers and the network in which the buying company interacts.

Company internal factors

Buyers usually adapt their behaviour to the tasks that are to be performed and, not least, to the company goals, strategies and procedures that direct, coordinate and control the activities of the buying centre. Usually, the company has decided upon a certain sourcing strategy. This strategy delimits a certain number of possible suppliers and outlines the general supplier business procedure. The sourcing strategy may allow or encourage the use of parallel suppliers of a certain product and may stipulate that the supplier relationship should not be very close. Alternatively, the sourcing strategy may stipulate that supplier relationships should be close and sole-suppliers should be used (Gadde and Håkansson, 2001). In addition to this, the management of individual suppliers usually takes place within the boundaries of a portfolio model. The theories about portfolio planning contain a thorough discussion of possible classifications of goods and services. Based on the criteria power, and ability to deliver the goods, etc., Kraljic (1985), for example, uses the terms strategic, bottleneck, leverage and non-critical. Thus, the applied portfolio model will contain a certain prioritisation of suppliers based on a number of central variables. Finally, the company’s buying policy will contain terms of delivery, payment, etc. However, in reality, researchers will invariably find deviations from the general buying policy because of special agreements.
with individual suppliers. Supplier performance will therefore be evaluated according to these agreements and they will influence the buyer’s supplier evaluation.

The fifth step to analyse buyers’ perception of supplier performance is the company’s sourcing strategy, portfolio model and buying policy. Turning to the formalised supplier evaluation, we will see that it often consist of two parts: the continuous performance evaluation and the more general evaluation of the supplier relationship (Freytag et al., 2000) (Table 2). The factors measured for individual deliveries can be divided into four groups: delivery performance, quality performance, cost reductions and qualitative factors (Monczka, 2005).

Table 2. Short-term and long-term supplier evaluation factors

<table>
<thead>
<tr>
<th>Continuous performance evaluation (Individual deliveries)</th>
<th>Supplier evaluation (Cooperation between the parties)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- observance of deadlines</td>
<td>- attitude to the cooperation</td>
</tr>
<tr>
<td>- ability and willingness to correct errors</td>
<td>- change readiness</td>
</tr>
<tr>
<td>- product quality</td>
<td>- production technology</td>
</tr>
<tr>
<td>- price development</td>
<td>- innovativeness</td>
</tr>
<tr>
<td>- ability to control quality</td>
<td>- strategy</td>
</tr>
<tr>
<td>- the suppliers financial development</td>
<td>- environmental policy</td>
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</tbody>
</table>

Naturally, the importance of these factors may vary. Another aspect of certification systems is that some systems require that cooperation with suppliers and control of supplier performance takes place in a predefined way.

The purpose of certification is to monitor the quality standard of the supplier and to form a basis for the supplier to improve his performance. The basic hypothesis of this investigation can therefore be formulated as follows: In supplier evaluation, the formalised evaluation systems do not stand alone but they are supplemented by the buyer’s more informal considerations which typically make it possible to relate to suppliers that somehow appear to hold a special position. On the other hand, there is hardly any doubt that a content analysis of the formalised supplier evaluation system is necessary to judge whether and to which degree deviations from the system appear.

The sixth step to analyse buyers’ perception of supplier performance is the continuous performance measurements and supplier assessment conducted by the buying company. In companies, purchasing is usually based on collective rather than individual decisions. The buying centre is the group of people who initiates, estimates, decides and evaluates the items bought (Webster and Wind, 1972; Lichtenthal, 1989). This implies that the attitudes and actions of other players in the buying process will influence the individual buyer.

The seventh step to analyse buyers’ perception of supplier performance is an analysis of the other players that influence the buyer and the supplier relationship.

**The buyer’s personality and behaviour**
Last but not least is the behaviour and personality of the buyer. Research in this field is scarce, but Wilson (1971) has demonstrated that buyers can be divided into three types: normative, conservative and switchers. The normative buyer has a low need for certainty. The conservative buyers usually have a high need for certainty and they tend to stick to well-known solutions. Finally, as the term indicates, switchers tend to switch between the two behaviours. The portfolio model suggested by Kraljic (1985) also indicated that buyers should adjust their behaviour according to the type of supplier relationship that the company aims for. Further, it was pointed out that one single buyer could hardly embrace all kinds of supplier relationships; therefore it was necessary to employ different types of buyers.

A large amount of research has been carried out regarding the importance of personality when negotiating. Negotiation styles are usually divided into cooperative and non-cooperative strategies, and persistent and non-persistent styles (Peddler, 1988). To some extent, it can be assumed that the goals and management instruments applied by the company, i.e. the company’s sourcing strategy, portfolio model, buying policy and employee incentives, will influence the negotiation style. On the other hand, a person’s attitude to competition and cooperation also reflects some basic human characteristics which sometimes can be difficult to suppress. The eighth step to analyse buyers’ perception of supplier performance is the individual buyer’s buying behaviour and personality.

In any buying situation there are a number of factors influencing buyers’ perception of supplier performance (see Figure 3). The factors outlined above are a good starting point for an analysis of buyers’ perceptions and evaluations of suppliers. In the following, we will discuss how these factors can be uncovered via an empirical analysis.

**Figure 3. Factors influencing buyers’ perception of supplier performance**

![Diagram showing factors influencing buyers' perception of supplier performance](image)

In the following, we will discuss and present the methodological research design, and we will argue why we regard case studies as a reliable and suitable research strategy.
Further, we will present our case selection criteria and then the cases. After the case presentation, an interpretation of the case results will follow. Finally, we will explain which techniques we applied in order to secure the validity of the results.

METHODOLOGY

The case study was selected as the research strategy for the investigation. The selection was made after thorough considerations regarding paradigmatic perspective and the nature of the purpose of the paper and finally the propositions and research questions.

The purpose of case studies is to produce a "thick understanding" of the investigated cases. The application of a case study is, however, based on several contingencies. First, it is appropriate to apply case studies when focus of the investigation is on specific actions that evolve from a context (Eisenhardt, 1989, p. 534; Merriam, 1988, p. 11), which is the case in this study (e.g. identification and understanding of factors leading to high buyer ratings). In this way, the case study approach gives us the opportunity to make a special elaborated investigation in the two selected cases and thereby to produce a holistic understanding of the investigated phenomenon. The purpose is, in other words, to create idiographic context dependent knowledge.

Secondly, case studies are especially appropriate when the researcher is searching after meaning that is believed to be context dependent (Bonoma, 1985, p. 204; Stake, 1978; Yin, 1994, p. 11-14). It is difficult to imagine that the business-to-business context does not in some way have an effect on the unit of analysis (buying centre) and the suppliers' actions and interpretation.

Yet another reason for choosing the case study is that Halinen and Törnroos (2005) argue that the case study approach is especially appropriate when studying business networks. Nevertheless, it is not unproblematic to apply the case study approach in network studies. In the same vein as Halinen and Törnroos which draws on Easton (1995), it is difficult to: (a) draw the borders between the unit of analysis and the case itself; (b) the problem of complexity, i.e. how does one describe a network?, what does it constitute?, how is it possible to "curb" the network in a methodological suitable way?; (c) the problem of time i.e. that the network itself is especially sensitive to time and, (d) problems with case comparisons. That is, the continuous dilemma between creating novel insights based on context specificity and unique case aspects and a need to generalize the findings to a broader context.

From the preceding discussion, one can see that there exist a number of pitfalls when studying business networks. Halinen and Törnroos (2005) however offer valuable guidelines to avoid some of the above-mentioned pitfalls. It is our intention to apply the guidelines they so aptly found to our specific research design. Furthermore, we elaborate more specifically on the techniques we utilize to secure the results.

According to Yin (1994), four different case study designs exist which are separated on the basis of: (a) number of cases: and (b) number of units of analysis. In this paper, several cases were selected (e.g. a multi case design), and focus was on one unit of analysis, namely the buyer. In this way, it will be studied if, for predictable reasons, patterns in one buying centre can be found in other comparable buying centres in other
companies (e.g. across time and place). In other words, a type 3 design was applied in this paper, where the case companies were selected with the intent to produce a predictable common pattern, which Yin calls “literal replication” (Yin, 1994, p. 46).

**Purpose selection**

In qualitative research designs, selection of cases and units of analysis are undertaken according to a purpose (Kuzel, 1999). The aim of this purpose selection is to create a highly contextual understanding of the individual case, and data collection is based on key informants (Gilchrist and Williams, 1999). Our informants were primarily found among members of the buying centre. Our studies showed that especially the final decision maker (often the buying managers) in the two cases had a detailed and extensive amount of knowledge about the aspects that we were interested in. Patton (2001) mentions 16 different sampling techniques of which we used two: theory based and stratified purposeful. Further, we chose to focus on the electronic industry only. This was done in order to avoid different norms and customs of particular businesses that could affect our interpretations and because this line of trade is characterized by extensive use of certification systems that increase formalization and the degree of systematic continuous supplier evaluation. Another selection criterion was size. One of our assumptions was that company size could play a role in relation to motivation (or need) for entering into close supplier relationships and in relation to the degree of formalization of the supplier evaluation system. Therefore, we tried to maximize the difference with regard to company size and we chose a case company with 6500 employees distributed over 70 countries and a case company with 20 employees only represented in one country. Finally, we chose case companies where access to the organisation itself was very open, and where the amount of obtainable information was as large as possible, i.e. where we could maximize learning (Stake, 2000). Thus, our selection criteria were:

- Key informants with extensive and relevant knowledge
- Same line of trade (electronic industry)
- Company size
- Degree of access to company
- Amount of obtainable knowledge

**An evaluation of the results’ truth value**

The validity and reliability of case studies have been questioned. It is, however, possible to ensure both methodological rigor and objectivity if a number of techniques are carefully employed. The quality of the results is, in other words, an important aspect when conducting research (Miles and Huberman, 1994; Patton, 1990; Guba and Lincoln, 1981; Yin, 1994; Maxwell, 1996); and triangulation (Patton, 2001). In this study, we ensured the integrity of the case study results by using the following four techniques.

1. Objectivity
2. Reliability
3. Internal validity
4. External validity
The explanation in this subsection draws on Table 3.

**Table 3. Concrete action to insure high trust value**

<table>
<thead>
<tr>
<th>Technique</th>
<th>Other notations</th>
<th>Actions</th>
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<tr>
<td>Objectivity</td>
<td>Confirmability</td>
<td>Recording of interview</td>
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<td>Transcription of tapes</td>
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<td>Note taking</td>
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<td>Chain of evidence</td>
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<td>Member checks</td>
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<tr>
<td>Reliability</td>
<td>Dependability, Auditability</td>
<td>Case study database</td>
</tr>
<tr>
<td>Internal Validity</td>
<td>Credibility, Authenticity</td>
<td>Case study protocol</td>
</tr>
<tr>
<td>External Validity</td>
<td>Transferability, Fittingness</td>
<td>Pattern matching</td>
</tr>
<tr>
<td></td>
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<td>Rival propositions</td>
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<td>Triangulation</td>
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<td>Close relationship between a</td>
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<td>and interpretations</td>
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<td>Multi case design</td>
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<td>Separate cross case analysis</td>
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**Objectivity**

Objectivity is evaluated by assessing the researchers’ neutrality concerning data collection, data interpretation and data presentation. Guba and Lincoln (1981, p. 104) define what they call confirmability by asking the following questions:

“How can one establish the degree to which the findings of an inquiry are a function solely of the subjects and conditions of the inquiry and not of the biases, motives, interests, perspectives, and so on the inquirer?”

In this study, the following was done to ensure objectivity. First, all interviews were recorded on tape and thereafter transcribed to paper. Notes were taken during the interviews and immediately after an interview. Secondly, it was explicitly demonstrated on what basis interpretations were made. In this way, what Yin (1994) calls “a chain of evidence” was established. Further, this was achieved by showing the actual raw interview extract that led to an interpretation. Further, the complete case report was sent to all the informants so they could comment and give their acceptance of the interpretations etc.

**Reliability**

Reliability is an evaluation of the possibility that other researchers’ might reach the same results if they used the same research procedure (Cassell and Symon, 1994; Emory and Cooper, 1991; King et al., 1994; McDaniel and Gates, 1991; Yin, 1994). Guba and Lincoln (1981, p. 104) ask the following question regarding what they entitle “consistency and auditability”:
"Consistency. How can one determine whether the findings of an inquiry would be consistently repeated if the inquiry were replicated with the same (or similar) subjects in the same (or similar) context?"

The following has been done to ensure a reasonable degree of reliability. First, a case study database has been developed (Miles & Huberman, 1994; Yin, 1994). This database is different from the individual case reports. The case study database was developed for each case company and contains: (a) documents (for instance newspaper articles, contracts of sale, minutes, interviewing notes, earlier prepared reports on related subjects, and raw interviewing notes); (b) numerical material (external and internal accounting reports, quantitative results, etc.) (Yin, 1994; Miles and Huberman, 1994). Secondly, a case study protocol was developed on the basis of both theory and empirical evidence, which was applied to all case companies (Eisenhardt, 1989; Merriam, 1988).

Internal Validity
In this case, the correctness, trustworthiness, authenticity are evaluated. In other words: are the results truthful? Guba and Lincoln (1981, pp. 103-104) define internal validity in the following way:

"How can one establish confidence in the “truth” of the findings of a particular inquiry for the subjects with which and the context within which the inquiry was carried out?"

Yin (1994, p. 33) has a more post-positivistic approach when defining internal validity:

"Establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationship"

In this study, the following was done to ensure a reasonable degree of internal validity. First, a pattern matching technique was applied on the single case company (Yin, 1994; Patton, 1990). Second, rival propositions were developed (Patton, 1990; Miles and Huberman, 1994; Fiss and March, 1975; Pelto and Pelto, 1978; Webb et al., 1981). In this way, there has been an ongoing search for other explanations. One example of this “search” could be the proposition concerning the consensus in the buying centre. Third, in the process of confirming results, multiple sources have been applied. Different types of triangulation have been used, for instance data triangulation, researcher triangulation and theory triangulation. Fourth, in the research process, the aim has been to establish a continued close relationship between theory, the unit of analysis and the found pattern (Eisenhardt, 1989).

External Validity
External validity concerns the degree of transferability of the found patterns (results) to another context than the context where the patterns originally were discovered (Campbell and Stanley, 1963; Webb et al., 1981). Yin defines external validity as follows:
"External validity: establishing the domain to which a study's findings can be generalized"

It is important to notice that, compared to positivistic research where statistical generalisation is important, case studies operate with the so-called theoretic generalisation, where found patterns are used to develop new theories, which subsequently can be transferred (generalised) or applied to other areas (Yin, 1994; Eisenhardt, 1989; Tsoukas, 1989). One wishes, in other words, to transfer the developed theory and not the results.

The following was done to secure external validity. First, thorough, holistic and deep descriptions have been developed of each case company and on how the interpretations have submerged. This is what Geertz (1973) and Denzin (1989) call "thick description". Second, a multi-case design has been developed so results can be compared across cases. By using a multi-case design, and thereby a replication logic, analytic generalisation has been ensured (Eisenhardt, 1989; Parkhe, 1993; Yin, 1994). Finally, a separate cross-case analysis has been carried out so that the external validity could be judged explicitly (Miles and Huberman, 1994). In the following, we will present the two cases and case results will be analyzed and interpreted.

CASE PRESENTATIONS

Case company 1: Scientific-Atlanta

Scientific-Atlanta2 (case company 1 – CC1) was founded in 1951 and now employs approximately 6,500 people in 70 countries. CC1 is operating in the broadband business and their customers are cable operators, programmers, broadcasters, telephone and utility companies, governments and corporations worldwide.

CC1 is a leading global manufacturer and supplier of products, systems and services that help operators connect consumers with a world of integrated, interactive video, data and voice services. CC1 has four business areas, namely:

Technology for the home
For example, subscriber network systems include Explorer digital network for computers, home gateways and home entertainment servers, and cable modems for the home. Devices that facilitate the use of digital video recording, high definition television programs, on-demand TV, e-mail, internet access and many channels of digital video and music.

High-bandwidth fiberoptic networks
In this business area, the company creates transport solutions for services that enable cable operators to launch interactive services over their cable networks. State of the art technology provides a range of advantages for the customer such as high levels of network capacity for interactive services, and it enables the customer to deliver video.

2 We would like to thank Scientific-Atlanta for the information on which this section is primarily based.
voice, and data services over the same metropolitan network, expands interactive bandwidth over the "last mile," and reduces costs associated with transporting cable modem traffic and VOD signals.

**Services that support customers**
In this business area, a range of services provide operators with a variety of management tools that enable operators to launch and support new services for consumers. Examples of the value that the service brings to operators could be launch of networks and services, expand, upgrade and build networks, integration of Scientific-Atlanta technology with third party and legacy products, manage key projects, plan, design, test, certify, operate and maintain network systems and train staff members on the latest broadband technologies and techniques.

**Media networks that connect cable operators to content**
In this final business area, the company delivers digital video compression systems that are helping programmers, broadcasters and service providers to transmit channels of digital programming in more than 170 countries. The system enables cable operators around the world to deliver the very best in entertainment and information to their subscribers.

**The purchasing function**
In CC1, the purchasing function is geographically split, mainly due to the large size of the company. Matters concerning strategic and global buying are placed in the central office in Atlanta under strategic procurement (SP) and worldwide procurement operations (WPO) respectively. The strategic procurement division is subdivided into three areas: (a) inductors and magnetics; (b) power mechanical; and (c) semiconductors, digital turners etc. Likewise, WPO is subdivided, and one of these subdivisions is placed in Denmark, where we had the opportunity to interview the key informant. The Danish subdivision cannot select its business partners by itself; it can, however, influence the selection indirectly.

Top management has decided that the company has to cut down on annual purchasing by $100 million from a total purchase spend of approximately 1 billion dollars. This decision is the primary goal in the company, and therefore it has a tremendous impact on the purchasing function. Basically, all tasks are directed towards this decision to lower spending and therefore it influences the culture of the purchasing function. This fact is important for the suppliers to realize because it implies that a supplier can only remain a supplier (or become one) if he can facilitate the implementation of the corporate plan.

In all CC1 departments, a pronounced ‘management by objectives’ style is prevalent. This implies that things are very formalized and a number of key figures are produced which are used to control development. These figures also enable management to act quickly, if they deviate from the originally decided course.
Case company 2: PAJ Systemteknik

PAJ Systemteknik (case company 2 – CC2) is a SME employing approximately 20 people. Since the foundation of the company, annual turnover has been in the range of DDK 7-15 million. The company was founded in 1997 and is still fully owned by the founder. It is operating mainly in the electronic industry, acting as a consultant and manufacturer in connection with software development and apparatus building. CC2 manufactures different electronic equipment such as measurement and control equipment and process control equipment. The core competence is perceived by the owner to be the ability to develop customized mechatronics, i.e. a product that combines mechanics with electronics as for example heart-lung machines or mechanisms that control speed and automatic stop in case of driver illness (dead man bottom) in trains.

Since its start in 1997, CC2 has had a good financial track record. They have been able to realize both a good absolute level of key figures and a good progression in the key figures. The company has four business areas, namely:

**Medico**
In this segment, CC2 delivers vital components (e.g. circuit boards) to products in the medical industry. Examples of products could be anesthesia apparatus, insulin pumps, heart-lung circulation machinery, and respiration machinery. The main customer is www.dameca.dk.

**Sensors**
The products in this area are different types of sensors that measure moisture, particles, aerosols etc. The main customer in this segment is www.testo.de.

**Traffic**
In this segment, CC2 primarily delivers automatic train control (ATC) systems. ATC systems control whether the train is running or not. Besides ATC systems, they also produce software and circuit boards for trains and bus information systems. The main customer in this segment is www.siemens.dk.

**Dental**
In this business area, CC2 is producing instruments to be used in dental practices. The main customer in this segment is www.ronvig.com.

In general, there is a low degree of competition on CC2’s customer side, but the opposite is the case on the supplier side. This fact combined with a strong urge to be in control means that CC2 use multiple sourcing when buying both standard components and more customized components. As the purchasing manager formulated it,

"*We try to keep our suppliers on the toes. They know the other suppliers but they do not how much we buy, nor their relative share of our total buy.*"

To some degree, multiple sourcing prevents CC2 from developing close supplier relationships although the conditions are undeniably there. On the other hand, the chosen sourcing strategy leads to some advantages such as low price, high quality, high
degree of control and quick response ability to activity variations. CC2 has positioned itself in a lucrative market position because of the relatively high entrance barriers on the customer market. To gain this position, it is not enough to actually deliver high quality. A company must also carefully document the quality. The latter aspect is one where CC2 performs very well. CC2 holds an ISO 9000 (quality control) certificate, the ISO 14001 (environment management) certificate, and ESD (Eurostatic Discharge/IEC 61340-5-1).

Supplier characteristics and management
CC2 has an annual purchasing budget of approximately DKK 6-7 million. The largest single post is circuit boards making up 30% of the purchasing budget followed by TLT monitors (10%) and the remaining 60% is standard products such as power supplies, tools, screws and sheet iron. They have divided the suppliers into two categories, those that deliver critical components/products, and those that deliver non-critical components. Today, they have three critical suppliers delivering circuit boards. Their share of the total deliveries of circuit boards is 10%, 30% and 60% respectively. The purchasing manager uses a simple, however detailed, control system where he can control single deliveries and all kinds of delivery failures that a certain supplier has made. This system is built on an extensive control when deliveries arrive.

Regarding critical components, deliveries are always controlled 100% regardless of the length of the relationship with the supplier in question. The choice of three critical suppliers is made deliberately. Firstly, because the company does not want to be dependent on one single supplier, and hence increase dependence on this supplier. Secondly, because the company wishes to maintain a certain level of competition among its suppliers. Thirdly, because it enables CC2 to meet unexpected needs for circuit boards due to increasing activities (multi sourcing). The critical suppliers are all characterised by having a size similar to that of CC2. According to the purchasing manager, this is an important criterion in order to secure a certain power balance.

CASE RESULTS

The interpretation of the empirical data from CC1 and CC2 will be organized around six central questions. The six questions were derived from the initial propositions. In this way we try to facilitate a logic structure between our data and our propositions and hence to bridge our empirical data with our propositions.

What is the perception of the suppliers’ task performance?

In both CC1 and CC2, the perception of suppliers' performance was that suppliers were performing well. In CC1, this was expected, for if suppliers were not performing well, they would be exchanged very quickly. This procedure is mainly due to the size of the company and hence extensive resource capacity. In CC2, the perception of suppliers performance was also very positive. This was mainly due to the fact that suppliers have the correct and required certification. Here, it was only possible to enter into delivery contracts if suppliers had a certain level of certification, because certification provided a safety valve for any future component errors that may occur. When buying from a
certified supplier, the company has done everything necessary in order to obtain the right quality. Errors or product failures in this line of business (cf. the case presentation) can have fatal human consequences for CC2. Therefore, the company must be able to identify errors and define whose responsibility this is because of possible legal proceedings and because the company wants to avoid the same situation in the future. Thus, our case studies showed that both CC1 and CC2 had very positive attitudes towards their suppliers, although for very different reasons.

What role does the supplier play?

In both CC1 and CC2, a certain level of complexity characterized product purchases. This means that some coordination was necessary and hence the supplier relationship could be characterized as ‘the extended supplier cooperation’ (cf. Figure 2). For CC2, the relationship is going towards a ‘partner relation’ In CC1, the continuous search for new and better suppliers, which can reduce purchasing costs, means that the investigated supplier-buyer relationship is short, i.e. less than one year. In addition, between suppliers and CC1 there is a large cultural and geographic distance, but the parties did know each other personally, and to some extent there was some personal friendship between the parties. CC1’s supplier has experienced a significant development due to the relationship with CC1, and the supplier was of some importance for CC1. Hence the relationship between CC1 and the supplier can be characterized as very important for the supplier, but less important for CC1, because CC1 has its value creating competencies internally in the company. The relationship seems strong though the power imbalance. CC1’s very good competencies, plus the company’s unwillingness to be dependent on one supplier draw in the opposite direction.

What is the strength in the investigated supplier-buyer relationship? (phase)

The obvious power imbalance between CC1 and its supplier speak against a close supplier relationship (Palmer, 1996; Gummesson, 1994). The CC1 key informant thought that the supplier relationship, examined in this case study, was both close and well efficient. However, the informant’s description of the relationship revealed a rather transaction oriented approach to the relationship. Thus, the SP buying function selects a certain geographical area in its search for potential suppliers. After a thorough screening process, they select a supplier and then the Danish division takes over in order to establish effective cooperation with the selected supplier. Much energy and many resources are invested in giving the new supplier instructions, creating effective ways of communication and getting to know each other. The perception of the supplier-buyer relationship is expressed very accurately in the following statement from the informant:

"We’re the ones in charge out there. Yes, I would almost say that our word is law."

Opposite to CC1, the buyer-supplier relationship in CC2 is more characterised by equality. In CC2, they deliberately select suppliers where the power balance between the parties is almost equal because, in general, this will result in a more efficient supplier-buyer relationship. The informant in CC2 expresses it like this:
"...I would never select a critical supplier which was very large, for example BB Electronic; they have customers paying a couple of million. They would give me lower priority; but they would never admit that."

This also implies that CC2's critical supplier-customer relationships are stronger than CC1's relationships because CC2 and their suppliers are much more dependent on each other and therefore there is a need for much closer cooperation. This tendency is intensified by a low cultural and geographic distance.

**How do the sourcing strategy, portfolio approach and buying policy affect the investigated supplier-buyer relationship?**

Both case companies have made some strategic decisions regarding sourcing, and these decisions definitely affect the investigated supplier-buyer relationships, simply because strategic decisions prevail over personal preferences. This became very evident during the interviews with the key informants. To a certain extent it almost seemed as if these decisions were a main reason behind the formation of personal preferences. On a more concrete level, it became clear that neither CC1 nor CC2 used any kind of portfolio models. Both case companies had a carefully formulated sourcing strategy which influenced the supplier-buyer relationship. CC1 had decided to outsource production in order to reduce costs which again could lead to the fulfillment of the company's profit goals and the expected profit development. On the other hand, any kind of development and control should happen inside the company. Therefore, the company mainly enters into relationships where power balance is in the company's favour: an asymmetrical situation which can be used to form and control the relationship and its development.

This is also evident in CC2's buying policies. In CC2's view, everything can be outsourced. This implies that they have developed very sophisticated cooperation competencies. However, the company always makes sure that they control the relationship as much as possible. Being a very cooperatively minded company, CC2 are more proactive when searching for new partners that can contribute in the development and realization of new business ideas. The company searches for partners, not only in the immediate 'neighbourhood' or same line of trade, but the search goes into other lines of trade and for example, to scientific and social science universities. One could almost say, that the decisive core competence is the ability to enter into relationships with anyone who can bring a process one step further. Opposite its business partners, CC2 has an overview and experience with the whole process, on which the partners work at a certain time.

**How is the performance measurement and overall assessment of the supplier conducted by the buying company?**

CC1 and CC2 apply detailed and formalized evaluation systems. On a concrete level, this is expressed through a number of key figures where the companies carefully study performance level and development. However, CC1 uses this key figure system much more systematically and much more often than CC2, and if deviations become too large, the company responds quickly. In addition, the evaluation system is much more complex and the guidelines for taking action are much more explicit in CC1. In CC2,
there is a larger tendency to use ‘common sense’ and self-developed techniques in order to identify potential problems in a supply company. These techniques could for example be an annual analysis of the supplier’s accounts, or special focus on the supplier’s staff to see if for example important employees are trying to get a job elsewhere. All these issues can easily be spotted due to a low cultural and geographic distance and due to a well-known and delimited business network.

A common feature of CC1 and CC2 is that some of the members of the buying centre use quite a lot of time on discussing incidents that have happened between buyer and supplier. In this way, a uniform understanding of a certain supplier’s performance is established.

In CC1 and CC2 there were a number of factors which were regarded as important in the overall evaluation of the supplier-buyer relationship. In CC1, these were:

- Price
- Quality
- Assisting in cost reduction
- Communication
- Delivery time
- Trustworthiness
- Development potential
- Power asymmetric and importance of the partners

In CC2, these factors were:

- Innovativeness
- Support of further development of ideas
- Cooperativeness
- Organisation size
- Power asymmetry and importance of the partners
- Price
- Quality
- Information in due time if anything unexpected occurs
- Delivery on time
- Trustworthiness

How can negotiation style of the buyer be described?

In CC1 and CC2, the personalities of the buyers were quite alike. Both of them were detail oriented, mainly introvert, very control oriented and their negotiation styles could mainly be characterised as non-cooperative. Another common feature was that the company’s buying policy and sourcing strategy prevailed over their own personal preferences. This means that both of them suppressed characteristics of their personality if they saw this as being against organisational practice or if this could lead to an outcome that was against what the company wanted. In addition, it turned out that the personality of the buyer was much in line with the purchasing practices of the
organisation, and this is probably the primary reason why both purchasing managers experience personal progress and success in their jobs. There are, however, many different reasons for this very evident harmony between buyer personality and the organisation’s purchasing practices. In CC1, buying policies were very clearly defined and fixed, and here the company deliberately employed a matching personality type. In CC2, it was rather the case that the buyer’s personality formed the buying policies and customs. This was possible because of the organisation’s size, age and level of competencies. What really matters for CC2 is just that supplier-buyer relationships work satisfactorily: that’s enough. The company does not focus on rationalisations, reducing costs or continuous and frequent control to the same extent as CC1.

CC1 and CC2 both built their expectations to suppliers on previous experience with the supplier in question and on the cooperation with previous suppliers. On a concrete level, these expectations were used as an internal standard against which supplier performance was measured. In order to be regarded as an outstanding supplier, it was not enough just to live up to these expectations, but to perform beyond the buyer’s expectations. Often however, this was only possible in very special situations and noticing when such a situation occurred was up to the supplier. A special situation can be described as an unexpected situation for the buyer where he is dependent on the supplier that he is willing to make an extra effort in order to help the buyer. Typically, the buyer needs something which is not included in the agreement. This special need almost always is caused by the fact that the buyer’s customer has experienced something unexpected as for example a sudden extra demand for particular goods. The supplier will often experience that the extra activities that are performed in order to help the buyer are not profitable. However, this is only the case in the short run because this supplier behaviour usually gives the buyer (including the buying centre) a very positive view of the supplier and hence an affective feeling of loyalty.

CONCLUSIONS AND IMPLICATIONS

The aim of this study has been to uncover the extent to which informal supplier performance evaluations influence the actual evaluation of suppliers. In order to uncover this, we initially listed four propositions that we will now discuss further.

The first proposition was about the importance of the supplier’s role in relation to the evaluation made by the buyer. As it appeared, the supplier’s role is clearly reflected in the applied evaluation criteria. For the supplier who attends to more simple tasks, the measurement will typically be a row of comparatively few parameters. On the other hand, for the supplier who also attends to more complex jobs, performance will be measured on a row of other parameters.

The second and the third proposition related to the difference between the outstanding and the average supplier in the short and long run. In other words, we were interested in a more elaborate understanding of what characterized the outstanding supplier from the buyer’s perspective.
The case results showed that to some extent, there was a difference between the suppliers as regards the significance of the evaluation dimensions. For both types of suppliers, it was important that the suppliers lived up to both the short term and the more specific evaluation criteria. The main difference was the outstanding supplier's increased ability to meet long-term and abstract criteria, composed to the average supplier. The outstanding supplier performed generally better than the average supplier. In other words, the outstanding supplier is better to catch and meet the customers' more abstract and long-term evaluation criteria than the average supplier.

The fourth proposition concerns whether more informal aspects, that are not directly included in the supplier evaluations, play a role regarding the buyer's behaviour towards the supplier. Here, it became evident that only some of the criteria that are important for the supplier evaluations are included in the applied evaluation systems. In other words, more informal aspects, which are not formally a part of the supplier evaluations, influence buyers' perceptions of suppliers and their behaviour towards suppliers.

In relation to this, we saw that both CC1 and CC2 use considerable efforts applying non-formalized and formalized evaluation systems. In spite of this, CC1 does not use its non-formalized evaluation system when they have to decide whether to terminate one supplier relationship and enter into a new one. The reason for this is mainly due to company size, including organisational structure and the non-relationship oriented culture, which prevailed in CC1. In CC2, there is a much more direct control of the buying function, which means that CC2 to a much larger extent makes decisions based on both the formalized and non-formalized evaluation systems. For CC2, entering into networks has great importance due to their limited company size. Therefore they are much more cooperatively minded than CC1. A decisive criterion for selecting future business partners is equality. They wish to avoid relationships where there is power imbalance, or where the importance of the parties is asymmetrical. It should be pointed out, however, that though CC2 is very cooperatively oriented, they find it difficult to show the same degree of trust that their partners show them. For example, they do not have any relationships where the supplier's final control is CC2's delivery control. This is, on the other hand, the case with some of CC2's customers.

CC2 primarily uses non-formalized evaluation systems when looking for suppliers and when entering into new supplier relationships. In CC1, they use a rather large amount of resources on communication, adaptations and instructions to the selected supplier, whereas CC2 uses resources on getting to know potential suppliers. This is often done via company visits where the supplier demonstrates what the company can deliver. Apart from this, CC2 checks the supplier's reputation in the company network and contacts some of the supplier's customers in order to hear their opinion of the particular supplier. Finally, they use some resources on communication and mutual adaptations after choosing a new supplier.

The question about the significance of more informal supplier evaluation aspects is central in this investigation. One problem is though, that persons are not always aware of what mechanisms control and influence their decision-making. This means that data collection via self-assessment is problematic. If the buyer is not aware of what mechanisms control his decisions, it can be difficult to explain to others why he acts in
way he does. One way of uncovering whether buyers act according to their beliefs would be observation studies (for example via video recording). Then the buyer could be confronted with the videotape and interviewers could ask what exactly was going on in some concrete situations. However, in our case studies, none of the companies were willing to participate in video observation studies.

References


