Industrial Pricing Process from a network perspective

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Abstract
The paper introduces industrial networks as a new perspective for pricing processes. In doing so, it focuses into the pricing interactions and activities in business exchange. Eight cases are studied as an iteration process between practice and theory. As a result, three distinct phases are identified for pricing activities from an industrial network perspective: preparation, negotiation and execution. The activities in each phase are described and illustrated by practices observed in the case companies. The main implication is that price becomes an element dependent of the business relationships throughout time, and on how buyers' and sellers' resources interact. By looking at how business exchange actually operates it provides a better platform for pricing decisions.

Keywords: *Price, pricing process and industrial networks.*

Introduction

Diamantopoulous (1991) on his literature review on pricing points out that the topic of price determination has been an object of study of distinct disciplines: economics, marketing, accountancy and finance and management science. In which the main issues have encompassed "the establishment of pricing objectives, development of pricing strategy/tactics, use of alternative pricing methods, the factors taken into account when setting/changing price, and the allocation of price responsibility" (Ibid, p.73). Depending on the discipline different answers have been sought in pricing processes.

Even though price determination is one of the most difficult problems marketing executives face (Dolan and Simon 1995; Marn, Roegner, and Zawada 2004), pricing processes have been a neglected topic in pricing literature (Simon, Butscher and Sebastian 2003). One of the reasons pointed out is that it is an industry and company specific issue (Ibid). Another reason is that companies are not comfortable to talk about prices. As a result, very little academic researched is observed in pricing process and despite its relevance the topic is short on data availability for research.

Traditional pricing processes (Dolan and Simon 1995; Forman and Hunt 2005; Lancioni 2005; Morris and Cantalone 1990; Shipley and Jobber 2001;) have provided overlapping recommendations. These recommendations have been mostly based on assumptions from economic pricing theory, in which three stand out: profit maximization, optimum price and resource homogeneity. The assumptions have been further simplified by adopting a short-term perspective to pricing. In practice, as the assumptions are seldom fulfilled, the theory becomes unrealistic and of little use to the single manager. In an attempt, to bring theory closer to reality, economic theory constructed sophisticated models, which are logical but of little practical use due to their complexity. According to Fog (1994), managers are not oriented to profit maximization, but rather profit satisfaction. The co-relation between profit and price cannot be denied, though. Companies that neglect the importance of profit, short- or long term, are bound to liquidation. Additionally, the optimum price is difficult to determine in practice and as it can only be determined ex-post, managers usually settle for an approximation. And finally, uncertainty plays an important role in pricing decisions as perfect information exists only in theory. As pricing processes are manifold, no single theory can explain everything, but there is no doubt that the assumptions adopted control the outcome.

Thus, as proposed by Håkansson and Walusewski (2005) by challenging one of the assumptions in economic theory, resource homogeneity, price takes a distinct role which becomes closer to what managers face in practice for pricing decisions. The resource homogeneity assumption leads to price as the only element in the marketing mix capable of generating revenues, that is, only through prices product can create value. From this stand point, price is independent of user's preferences and is given by the interplay between supply and demand. Price has the role to create the optimal mix between market share, revenue and profit. On the other hand, taking a resource heterogeneity assumption implies that "price can be affected by active counterpart's engagement in resource interaction" (Ibid, p 114). Price becomes an element embedded in the structures of the producer and user sides, and can only be understood as an outcome of interaction and resource combinations.

As a result, by introducing a network perspective to pricing processes, price determinants reach beyond costs and value discussion and are also related to positioning in the network and negotiation capabilities throughout the activity chain. That is, it is not enough to deal with clients, it is also important to involve other actors in the pricing process, like suppliers. Additionally, past behaviour in pricing processes should be taken into account, as it influences the establishment of reference prices, and more importantly a reference pattern of behaviour through pricing activities. No doubt it adds to complexity realizing that each business relationship has its own pricing dynamics. However, a combination of the pricing activities conform a pattern, an activity system which elements need to be understood in order to find out where opportunities and constraints lie, providing a better platform for price changes.

The structure of the paper is as follows. First, the research method is explained, in which the iteration between practice and theory enabled the development of a new perspective to pricing process. Therefore the social context of the sample is also described in order to provide the canvas for the cases drawn on to illustrate pricing activities. Then, in order to understand the current view of pricing processes, a literature review on the topic is presented. Afterwards, the implications in adopting an

industrial network perspective to pricing process, based on the work of the Industrial Marketing and Purchasing (IMP) group, discloses a framework of three distinct phases. Each phase has main pricing activities, which are then unfolded and exemplified by the sample companies studied. Finally, a discussion and conclusion indicates the main implications for management, as well as directions for further research.

Research Method

This paper takes a descriptive approach to industrial pricing processes. It is a multiple case study, where an inter-play between theory and practice has been the dominant form. Therefore it does not follow Yin's (1994) approach but rather is more aligned with Dubois and Araujo's (2004) view of cases as a convoluted process of systematic iteration and combination of empirical evidence, theoretical frameworks and persistent reframing of what it is the researcher is studying.

Eight cases are studied, of which 6 are currently facing decline. One of the healthy companies is a component supplier with 50% of its sales directed to this segment of declining companies, and the other one has focused on a niche for the past 20 years. Nevertheless, both have also started to experience the same pressures of price reduction as the declining group.

Albeit the high sensitiveness of the topic, price, quantitative data have been obtained under confidentiality clauses. Thus, data are mostly qualitative and based on personal interviews at different levels and functions within the companies. First, a set of interviews in order to understand the companies' sales organization, product line, distribution channel, client base and promotion capabilities has been important to formulate the questions pertinent for each company as far as pricing process is concerned. The first interview regarding pricing process was uniform for all companies and aimed at finding out pricing objectives, methods and systems, besides identifying the key employees responsible for pricing tasks in the organizations. Additionally, two product types were chosen in order to follow the pricing process: a traditional product or line of products, which represents the companies' core business, and a new product.

The following interviews in each company became then asymmetric depending on the degree of openness, company size, characteristics of the turnaround strategy adopted, the timing and pricing process itself in each company. Some have been quite simple, while others present a higher degree of complexity. Altogether there have been 55 interviews of 120 minutes each in average over the period of 12 months. It has also been possible to sit at two negotiations with sales agents, and meet two other sales agents operating in Germany.

Despite the fact that pricing processes can be company-specific, and from a network perspective, relationships-specific, some overall elements are similar in the sample studied. An important contribution from network perspective into pricing practices is the need to take into account the social context in which the companies are embedded in. In this sense, history matters. Thus, before describing pricing processes from an industrial perspective, a brief description of the context is provided.

The Danish Pine Furniture Industry

Most of the Danish pine furniture manufacturers originated from excess capacity of plants for wooden house building that suffered a downturn with the oil crisis in 1973. Carpenters saw the opportunity to survive by changing the business to furniture component manufacturers and later on started producing the whole furniture themselves. Due to the IKEA's concept of doing business, the need for ready-to-assemble (RTA) furniture increased. The industry experienced a continuous increase in demand in the 1970s and in the 1980s, alongside new investments in the production capacity and growth in the number of employees.

The plants are located in the Salling district in Jutland within a 120 km radius, which has rendered them the characteristic of a geographic cluster. In practice revealed a great flow of workers among those companies that inevitably also lead to imitation in their activities, from furniture design to production process, and contacts to the same suppliers and clients. More than 90% of the production

is exported to countries like Germany and England, and most recently, France, with large retailers and mail order companies as their main customers.

However, in the mid-1990s, the trend for pine furniture in Denmark started to cease and IKEA changed most of its supplier base from Denmark to low-cost countries in the Baltic area and Asia. As a consequence, Danish pine furniture manufacturers started to look for new markets and faced stronger competition among themselves. Cutting prices became the rule to get an order, and retailers took the opportunity to corner manufacturers by "commoditizing" pine furniture. They provided the drawings, set standards for quality and delivery, leaving price as the only parameter for differentiation among the Danish suppliers. As a result, product development in the Danish manufacturers was geared to produce at lower costs every time, and the most common way chosen was to reduce the thickness of the wood. Soon, RTA pine furniture became associated with a discount product due to its low price and thin boards, which lost the association with solid wood and became comparable to even cheaper substitutes, like veneered particle boards. Additionally, the mere existence of a product line in a retailer was based on the successfulness of past sales, and the square meters for product display was based on revenues. With lower prices, even if the companies sold more products they had a continuous reduction of product display. And whenever a product did not reach a minimum sold volume, it was eliminated from the catalogue, leaving room for new product from competitors who had success in sales. The continuous price reduction is illustrated by a company and its most representative product. In 1995, a piece of furniture was sold at DKK 1260. Seven years later, the company experienced a price reduction of 50%, and in 2005 the price was DKK 450. These figures do not only show that today prices are 64% lower than in 1995, but as each year goes by DKK 90 is slashed of the price. "Unfortunately, the (price) reduction is not a reflection of productivity gains, but pressure from our clients", says the owner.

As a result, since 2000, Danish pine furniture manufacturers are struggling for survival. Fierce price competition from peers and other suppliers from the Baltic area and Asia have crumbled profit margins. Today, every Danish plant operates with significant overcapacity. Instead of running 3 shifts as they used to in 1998, in 2005 most operate with 1 shift but some still manage to hold two shifts. Bankruptcy occurs often enough to make one wonder who is the next in line. In 2000 there were 88 pine furniture producers in Denmark, dropping in 2002 to 11, and the association of Danish Furniture Manufacturers expects that 90% of sales of pine furniture from Denmark will be in the hands of 8-10 companies in the near future (BAT, 2003).

Currently, all companies are attempting to move away from their traditional operations in order to survive. One of them was bought by a competitor with branded products and ensured its continuity, although internal changes were required. Another is moving from a furniture producer to a furniture wholesaler. Four others believe in maintaining a production facility in Denmark still, three of these are increasingly outsourcing and introducing designers in their product development teams. A different strategy has been adopted by one of the smaller companies by acting as a component supplier for a window manufacturer. While a component manufacturer is establishing a joint-venture abroad, in which its main contribution is its know-how. All these changes have affected pricing processes in the companies and emphasized the constraints and opportunities in their pricing activities.

Within this context, the interplay between theory and practice has paved the way to finding a distinct perspective to pricing processes among the eight companies studied and their clients and suppliers. Next, industrial pricing process from an industrial network perspective is presented and illustrated by research findings.

Pricing processes

Some authors (Dean 1976; Nagle 1984) present pricing as an art, and in this sense, it can be interpreted as a skill acquired by experience, study or observation. Nagle and Holden (1995) add that pricing should be designed to capture the value that has been created by the other elements of product, place and promotion. Simon, Butscher and Sebastian (2003) stated how important it is for a company that is able to deliver a value to its customer to extract that value in the form of price.

Thus before extending the study on processes, a definition of price is called for. Cox (1946, pp. 376-377) provided a comprehensive definition of price that takes into account a diversity of influences (Diamantopoulos 1991):

"Price can be defined…as an agreement between seller and buyer concerning what each is to receive, embodied in a formal ratio between quantities of money and quantities of goods or services modified by formal and explicit or informal and implicit understandings as to:

1. The quality of the goods or services to be provided, or alternatively, the premiums and discounts to be applied to deliveries whose quality varies from a specified standard.
2. The times and places at which the privileges and responsibilities of (a) possession and (b) ownership are to pass from seller to buyer.
3. The particular form of money to be rendered in payment.
4. The times and places at which payments are to be made and accepted.
5. The services furnished by the seller without extra charge, such as advertising, servicing the product, and return privileges."

In practice, other issues arise as (i) the list price, may not respond to the price paid (Harper 1966), (ii) there is a distinction between relative (or real) and absolute (or money) prices and (iii) price bundling, when price is quoted for a set of product or services. Nevertheless, price is relevant in the functioning of the economic system and has implications for business and consumers. Consequently, in such a plethora of aspects related to price and processes, it is important to clarify the direction of pricing processes study in this paper. First of all, the realized price is the main focus. Secondly, the type of economic exchange studied is business-to-business. Thirdly, despite the fact that some business-to-business still rely on spot transactions, long-lasting relationships with continuous business exchange are the main processes studied. And finally, an industrial network perspective is applied to pricing processes, aiming at looking at the role of business interactions in pricing.

Traditional pricing processes

From a business-to-consumers point of view it is comprehensible the stand point (the seller perspective) taken by many authors up to date as far a pricing is concerned due to the difficulty in "knowing" the individual customer and dealing with the data. Although market segmentation techniques have functioned as a way to identify main differences in the homogeneous mass of the market, it is only recently that the development of information technology has enabled the data administration, from which companies can start relating to a single end-user. Nevertheless, most of the literature in pricing process has a business-to-consumers standpoint, which has influenced some industrial pricing process authors as well. Next, a review of the pricing process up to date is presented.

Morris and Cantalone (1990) developed the strategic pricing program (SPP) in which four components, namely, price objectives, strategy, structure and levels should inspire managers to avoid a reactive posture to pricing issues. The pricing program also takes into account internal (overall company strategies and costs) and external determinants (customer demand, competitor actions and legal constraints) which must be continuously evaluated. Clearly, the success of the pricing plan lies on the subjective interpretation of the managers, in assessing the interplay of the determinants and implications for each component. Unfortunately, the authors do not extend their analysis on that level but do criticize the fact that much of the effort on pricing process had been largely descriptive.

Dolan and Simon (1995) in their book appeal for the development of a pricing capability of companies (or its managers) in which they should master three domains. In this sense, they complement the SPP (Morris and Cantalone, 1990) by providing tools for the subjective interpretation. The first domain questions the extent to which the company believes it can control its pricing. The second domain comprises of the company's understanding of its context, by analyzing customer value, competitors, and the company situation. The third domain refers to price implementation. In contrast to other pricing process presented in the literature it is a more pragmatic approach, easily applicable in practice as it simply points out areas of capability improvement for the manager. Although the ability of a company to control price is not given, the focus lie mainly on internal capabilities of the company in managing price, and it is not related to its interdependence to other companies.

Shipley and Jobber (2001) propose the pricing wheel in an attempt to introduce dynamism to the pricing process. Their multistage process provides a systematic means for analyzing and incorporating to decision making the strategic role of price, pricing objectives, internal and external determinants, pricing strategy, pricing technique, and implementation and control procedures. Their main contribution is to highlight the fact that "pricing is an activity that has to be repeated when market and company conditions vary so that on going assessment is necessary to recognize when prices should be changed" (Ibid,p. 302). However, their perspective holds an inside-out view of the firm and the market is seen as a homogeneous mass. Pricing determinants influence the degree of pricing freedom, but it is still up to the subjective interpretation of managers to observe variations in market conditions.

Lancioni (2005) explicitly proposes a pricing plan for industrial pricing composed of 7 parts: 1. A summary of the pricing strategies and recommendations of the company, 2. an overview of current market-pricing situation, 3. a SWOT analysis , 4. the pricing strategy (s) that the firm is currently employing in its market segments, 5. the pricing objectives, 6. the pricing program, 7. the monitoring mechanism. The plan is geared into building value into pricing in four areas: product availability, form utility, the level of research and development and quality. Inspired by Dolan and Simon's (1995) work, he sets three requirements for a successful pricing plan: a pricing mindset, the existence of a process that bears the plan and the understanding of customer and market trends. Nevertheless, most assumptions and terminology remain from pricing processes in B2C. The market is still visualized as a homogeneous mass and the product is the basic parameter to which price is related to or by, depending if assuming a customer or product driven focus.

Forman and Hunt (2005) take another approach to industrial pricing strategies by analyzing the influence of external and internal determinants in international pricing strategies of 135 companies. Their findings indicate that factor determinants like, international experience, product technology, degree of internationalization, market share and environment influence how managers weigh internal or external determinants in international pricing decisions. Moreover, those factors directly affect which pricing strategies managers employ. However, those decisions are still driven by managers' perceptions regarding the relevance of internal and external determinants.

All these processes contain overlapping recommendations, among which the need for defining pricing objectives, assessing price determinants, define a pricing method, align the method with tactics, implementation and control (Kotler, 2003). As the terminology for pricing strategies and methods is not aligned among the authors, for the purpose of this paper, I choose to separate those concepts based on their distinct use. Thus, pricing method is defined as the usual procedure applied in the pricing processes, cost or market approaches, whilst pricing strategy refers to more specific actions aimed at specific segments or products, for example, new product launching or a new export market.

However, from a business-to-business standpoint distinct characteristics arise which may impact pricing process. The first is the fact that the buyer and supplier are identifiable in the market. The second is interdependence. Buyers may also be involved in the pricing process through, for example, product development. In this sense, ignoring the buyer/supplier role in pricing processes gives an inaccurate sense of price management, and probably explain why some pricing strategies do not succeed, despite well-thought through pricing processes. And finally, the base for subjective interpretation lies on patterns of behaviour through time.

Pricing Processes from an Industrial Network Perspective

The Industrial Marketing and Purchasing (IMP) group network perspective contend that business relationships are long lasting (Håkansson 1982), but not permanent, and those relationships are embedded in a network of relationships (Håkansson and Snehota 1989). Adopting this approach implies that three managerial myths need to be challenged (Ford et al. 2002). The first is the Myth of Action, in which business processes are seen as a result of the action of one firm and the reaction of another. Actually, business network consists of many active and heterogeneous companies each interacting with others and seeking solutions to their different problems. The next two myths, Independence and Completeness, view the company as an island. However, companies are interdependent and therefore have little option to act and build independent strategies and alone they do not have the resources required to survive. This different perspective calls for attention to business interactions. With time these interactions develop a relationship atmosphere that through its

dimensions (e.g. power-dependence, conflict-cooperation, closeness-distance, and mutual expectations) affects future interactions (Wilkinson 2001).

In the core of most business interactions, price is an important element as it seals an agreement between seller and buyer (Cox 1946). However, price in marketing and management science has its roots on the traditional assumptions of strategy management: (i) the environment is faceless, atomistic and beyond the influence and control of organization, (ii) strategy results from the deployment of resources controlled hierarchically by the organization and (iii) organizations need to continuously adapt in order to fit the ever-changing environment (Håkansson and Snehota 1989). The implications from this standpoint is that pricing activities have relied heavily within the boundaries of the firm, using environmental factors as enablers/constraints in a organization crusade to overcome interdependency and attain control over its activities and resources.

Thus, looking at price from an industrial network perspective requires a shift to the interaction itself and its development overtime, as well as the network positioning of those involved in the focal net (government institutions, buyers and suppliers). As stated by Gadde, Håkansson and Harrison (2002), "price is a key variable when a buyer and seller relate their operations to one another and to other relationships" (p.13). An interesting feature from a network approach is the double role of the organization as buyer and seller depending on the activity performed, and how it impacts pricing processes.

Gadde, Håkansson and Harrison (2002) were the first authors to take the focus in the interaction and propose the concept of price in a relational context. In their proposition, price is one aspect of a complex pattern of primary and secondary costs and revenues in the exchange process among buyers and sellers in industrial markets. Its standpoint is that one man's price is another man's cost (Brown 1967) but enriches the concept by taking into account mutual benefits (Boulding 1966) or drawbacks represented by secondary costs and revenues. Although they do not present how price is set from a network perspective, important implications can be derived from their work. The first implication is that prices should reflect the pattern of costs and revenues of a transaction, "the price paid represents only part of the primary costs of the buyer and primary revenues of the seller" (Gadde, Håkansson and Harrison 2002, p.10). This finding has repercussions in pricing objectives and methods. Secondly, the price agreement depends on the level of perceived revenues from the buyer's side and perceived costs from the seller costs. Thirdly, price and pricing are dimensions of the interaction and not something decided before hand by the seller. Thus, the role of subjective interpretation and interdependence (Ford and Håkansson 2006) in pricing process cannot be neglected, which has implications for pricing strategies or, more appropriately, pricing intents. Fourthly, price is an embedded character of the network structure. That is, the effect of one price transaction into others, with the same counterpart or others.

Despite the fact that an industrial network perspective places the realization of price in the interaction, it does not mean that pricing activities do not occur before this phase. Håkansson and Snehota (1989) affirm that the activities between the organization and other parties, rather than the activities within the organization itself, determine the bargaining position and overall effectiveness of the organization in achieving its goal. Nevertheless, there are activities within the organization that reflect or induce a pattern of activity in the interaction.

Business Action Theory (BAT) phase model (Goldkuhl (1996, 1998) has been mainly deployed by three authors (Axelsson, Melin and Goldkuhl 2002; Melin and Goldkuhl 1999) to analyze interaction in a business relations. There are six generic phases identified in the model, where the different characters of the business actions and their corresponding exchanges function as sharp criteria for the phase division. The six phases are: 1) Establishing business prerequisites phase, 2) Exposure and contact search phase, 3) Proposal phase, 4) Contractual phase, 5) Fulfilment phase, and 6) Assessment phase. Translating those phases into pricing activities performed by buyers and sellers, it can be simplified into three main phases. The preparation phase encompasses the first and second ones in the BAT model, and considering the interconnectedness of phases, assessment is also dealt in preparation but in a different time frame. The negotiation phase includes phases 3) and 4). And finally, the execution phase, addresses the fulfilment stage.

As a result, from an industrial network perspective the pricing process can be separated in different phases: 1) preparation phase, 2) negotiation phase and 3) execution phase. Two of the phases occur

as interactions, negotiation and execution, whilst the preparation phase takes place within the companies' boundaries. Although for study purposes these phases are delimited, an overlapping of activities among them is likely to occur. In this sense, there is not a linear timeframe for the distinct phases. Considering continuous interactions one phase is able to feed the other two with important elements shaping activity patterns and relevant information for future interactions, which may influence pricing activities.

The preparation phase has similarities with pricing processes presented so far, however it adds the awareness of how the interactions with buyers and sellers already affect price in this stage, for example, through product development or make-or-buy decisions. The negotiation stage reflects the preparation stage which took place on the seller and buyer sides and the outcome is dependent on how the parties initiate and infuse options. The execution stage has similarities with monitoring and implementation from a classical view, however once again the focus is on relationships, not only with the buyer in focus but also with sellers and competitors which may impact pricing decisions within the network. Moreover, usually in this stage, managers are rarely involved. Assistants maintain the daily contact with the buyer/supplier. Oddly enough, it is where an important share of information is retrieved and energy can be introduced in the relationship to avoid deterioration (Hedaa, Geersbro and Schurr 2005).

[Insert Figure 1: Pricing phases from an industrial network perspective]

Next the main pricing activities in each phase are unfolded in order to identify its main elements:

Preparation phase

The main pricing activities identified in the preparation phase are: determining pricing objectives, applying pricing methods, configuration of pricing intents and sensing the market. Each activity is explored next.

Determining pricing objectives. Within the preparation phase, the definition of pricing objectives is still important as an indication for direction for the company. However, instead of looking at only the seller's objectives it is important to take into account the buyer's as well. According to Diamantopoulos and Mathews (1994), pricing objectives have been studied from different perspectives. A traditional view represented by conventional price theory and industrial organization attests profit maximization as the main objective of firms. The utility and managerial theories remain with maximization approach but also include other goals (e.g. sales). These other goals may be incorporated on a total utility function or are subjected to constrained or unconstrained maximization. On the other hand, average cost theories and viability theories deny the concept of maximization while maintaining profit as a main goal. And finally, behavioural and homeostasis theories argue that the "firm seeks to achieve a balance among multiple (and possibly conflicting) goals" (Ibid, p. 74). The authors criticize the empirical literature available on pricing objectives (Abratt and Pitt 1985; Fitzpatick 1964; Fog 1948, 1960; Haynes 1962; Nimer 1971; Said 1981; Samiee 1987; Shipley 1981) by failing in testing theories either from an operational, methodological or analytical stand point. Thus in their single case study there is an attempt to include all dimensions of pricing objectives: content (i.e. nature), the desired level of attainment and the associated time horizon. Some important conclusions arise from their work: (i) a complex pattern of interrelationships may link different objectives to one another and (ii) the influence of external constraints in form of market conditions affects the specification of pricing objectives.

Besides the seller's internal conflict of pricing objectives, the constraints from the outside world indicate the dependence of one's objective to another's endorsement through business exchange. As a result, the issues of business interaction come into play. Therefore, the pricing objectives of other actors throughout the activity should also be sought. With a better alignment of objectives it is more likely to find out what is valued in the activity chain and consequently aid seller's and buyer's achieve their complex objectives. Moreover, the goals and motivations drive actions and activities (Johansson and Rohrer-Murphy 1999). Thus in order to find out the genuine pricing objectives of companies it is more fruitful to look at their pricing activities than through questionnaires, as researched up to date.

Box 1 Determining pricing objectives in the case companies

In the 8 case companies studied, when asked about their pricing objectives, 6 responded that their main objective was profit. However 4 of them presented operational loss and the remaining 2 were close to breakeven for the last 3 years. The two companies that financially performed above the average of the group were aware that their pricing objectives were a combination between profit and volume. As the observation went on regarding the activities related to pricing goals, it became clearer that the answer of the 4 companies was more linked to what the managers and owners believed in rather than what actually happened. Their linkage to production was so strong that they actually believed that keeping the machinery running at any cost would assure the survival of their companies. Therefore, prices would reduce significantly as the volume increased, but without any consideration to profit margins.

In the past year, this assumption has been challenged and at least 3 of the companies have made conscious effort to avoid selling below costs. Nevertheless, this assumption also implies that the companies have knowledge of their costs (see Box 8 for further illustration of this topic). Besides this asymmetry between what is said and done as far as objectives are concerned, none of the companies take into account the buying objectives of their clients. Yet there is another underlying assumption. They assume the buyer is looking for the lowest price (primary cost), as it is a reflection of how most of them handle their purchases.

In practice, it is not easy to find out others' pricing objectives for a specific transaction. However, as B2B transactions have a long-term character, pricing activities between sellers and buyers shape a pattern, which can be used to feed information for the next interaction in order to keep the pattern or challenge it.

Applying pricing methods. Diamantopoulous (1991) calls attention to the fact that pricing methods are as varied and dynamic as pricing objectives. Pricing methods vary in sophistication, formalization, and implementation, which are also influenced by organizational and environmental factors. According to the author six basic types of pricing methods are described by empirical research, as shown in the table below:

[Insert Table 1: A taxonomy of pricing methods (Diamantopoulous 1991)]

Shipley and Jobber (2001) propose the interative method combining the primary focus: cost, demand and competition. The floor determines the minimum and reflects the cost focus, assuming a desire to profit. Whereas the time horizon adopted as an objective will determine the use of direct costs for short-term goals or average costs for long term one. The ceiling is the maximum price that can be obtained and refers to a focus on demand. In between these limits many factors (internal or external), including competition, adjust the price. This method, in order to be applicable, implies that the company is able to determine its floor and the ceiling. From a network perspective, the floor is very dependent on the seller's own negotiation with its suppliers, also related to make-or-buy decisions, as it has been proposed by the concept of price in relational context. Whilst the ceiling is hard to identify as it is related to secondary costs and revenues.

Box 2: Applying pricing methods in the case companies

From the taxonomy of pricing methods, the companies have also presented asymmetry between what managers answer and what they actually do. Although all of them claim to be proactive in their method, either by adopting a cost-plus pricing or value pricing, with only two companies in the latter category, in practice, reactive and imitative pricing is the rule. Six of the companies studied are used to prepare a pricing list of their traditional products. However, it is seldom that the price list is applied for the main buyers, serving only as a reference in those cases. Whenever a product is presented to retailers, these buyers confront them with the price from other suppliers in the market. The product itself may be slightly different but the buyers make a request to change the design in order to make the product more similar. As a result a new product is developed in order to at least match competitors' price. Consequently, it is not rare that prices fall below production costs as companies either are not aware of their costs or assume that the machinery running will guarantee their survival.

Depending on the size of the buyer, an exclusive series of furniture is developed and the buyer already is part of product development in the drawing board stage, defining also the ceiling for pricing. Managers claim that they have not experienced that this price ceiling is ever exceeded but may fall below.

This imitative pricing routine already prepares the buyers and sellers to what they should expect from each other next time. It is frequently said: “Next year, we must have lower prices”. This practice has also contaminated pricing process for new products launched in other wood types. In one of the companies in 2005, the sales manager said even before the product was tried out in the market: “We need to reduce prices in order to achieve higher volumes next year otherwise buyers will not be interested at all. This is how it has worked with pine wood.” Another manager affirms that their pricing methods for new products are not dependent on costs anymore, but on what the market can bear: “Cost-plus pricing never more!” Still it is early to assume how new product pricing will fold out in the long run, as at this point the companies are unfamiliar with the new buyer’s practices and markets.

In this sense, it is clear that sellers may have distinct pricing methods depending on the type of relationships they have with buyers, and the amount of resources that is combined during this process. Additionally, a pricing method when applied time and time again becomes a routine and is seldom revised. However, if a change in price levels is called for it is the breakage of this routine that can enable it in the long run, either by changing buyer/seller bonds, ties or links.

Structuring pricing intents. Pricing strategies have been discussed extensively in pricing literature as one of the tools sellers can deploy to achieve their pricing objective. Tellis (1986) presented a taxonomy of pricing strategies based on two dimensions: the objective of the firm in exploiting shared economies and the customers characteristics necessary for each strategy. Duke (1994) modified Tellis’ approach and developed the framework of Price Strategy Matrix, which should allow managers to judge quickly the appropriateness of pricing objectives and strategies for special circumstances of market/segments. Five years later, Noble and Gruca (1999) specified which pricing strategy managers use in different situations, where determinants like new model, mature market, substitute/complementary products and difficulties in determine demand could also be used to predict a pricing strategy.

This traditional way of thinking pricing strategy searches for a fit between the seller’s internal resources to the environment. Nevertheless, the above mentioned authors acknowledge indirectly the role of interaction. That is, even though the seller has a pricing strategy, it can only be realized when and if business exchange occurs. Otherwise, it is just a plan. Thus, in order to avoid confusion, for the purpose of this paper I use the term of pricing intent, as it does not look for a fit between the seller’s internal resources and the environment, but rather provides potential elements of establishing and maintaining relationships with buyers, as proposed by Håkansson and Johansson (1988).

Box 3: Structuring pricing intents in the case companies

In order to add more value to its offering, one of the companies studied decided to involve other partners in the pricing process, and introduced a design house to start providing ideas for the buyer of what are the future trends in furniture and what they should expect to sell. They also visited the customers’ selling locations in different markets and researched how the end-users usually bought at their store. Their rational is that bringing more value to the negotiation table should reflect in higher prices. However, the contact buyer has been the same one that time and again has fixed certain parameters such as delivery and product quality, leaving only price and volume as variables to negotiate. Even though the value the company is proposing may be validated by the buying company, it is not clear that the buyer is aware of that, as he may be locked in his previous routine of price negotiation. It may take longer time than expected for the perception of value to come through in the buyers side and highly dependent on the “hit” rate of products in the catalogues.

In another case, a component supplier has built its business strategy in keeping at least 50% of its sales in Denmark. Despite the fact that furniture producers have been struggling for the past 5 years, it was only last year that they realized that their customer base was vanishing and fast. There were efforts in building partnerships and providing a continuous delivery of a component in which price had to match the furniture manufacturer’s in-house production of the component and its quality. A few months later, the furniture manufacturer has reduced significantly its production and has increased significantly its outsourcing of whole furniture in Asia, leaving the component supplier with less revenue than expected.

One aspect neglected in the pricing strategy literature is the issue of time. “Time largely defines the nature of interaction as a process in which sequential events are related to each other. History matters

in interaction and so do future expectations" (Ford and Håkansson 2006, p.10). Therefore, pricing intents should take into account what has happened in the past and the expectations of the parties for the future business exchange. As the pallet of pricing intents is determined by past interactions which form a certain pricing logic dominant in the focal net, any intent to change in price levels will require the change in the current activity structure and consequently call for a new combination of resources that justifies a new logic. The endorsement of this intent can only take place in the negotiation phase and requires mutual recognition, from buyers and sellers, for change to occur.

Sensing the market .The term "Marketing Intelligence" was first proposed by Kelley in 1961, and since then many companies have established market intelligence departments aimed at collecting significant data in order to improve manager's decision making. Four years later based on communication theory, the author defined the information flows of a company and established the rationale for intelligence services. He points out that although "informed decision" is a relative concept and bound to biases and distortions, better evaluated, more reliable and concise information can aid managers to manage the future.

Mochtar and Arditi (2001) studied the role of marketing intelligence in making pricing policy in construction and found a correlation between the marketing intelligent capabilities with the pricing method used. In their research, contractors with extensive marketing intelligence preferred a market base approach to pricing.

The problem with this concept and with others that followed (market orientation, market research, market learning, customer satisfaction, market knowledge and market learning) is the lack of focus on the inter-organization activities as a whole and relying only on customers. Market sensing is a broader concept as it also includes other inter-organizational activities as proposed by Ritter (2006). As pricing activities are influenced by a number of inter-organizational interactions, it is important that the organization is able to sense the market, and thus include suppliers, competitors, financial institutions, regulatory agencies and other relevant actors that are part of its pricing realm. Thus, the context of an organization (Håkansson and Snehota 1989) and the atmosphere of the interactions (Turnbull and Valla 1986) become two foci of analysis for market sensing.

In order to develop tools to handle information on pricing for more effective pricing decisions, Lim Slotegraaf and Walters. (2006) have juxtaposed two schools of pricing capability development: technology and people. The technological school sets objectivity and precision as determinants for effective pricing, and consequently information systems and pricing engineering expertise gain relevance. Whereas the people school relies on market sensing and concerted organizational action supplemented by coordination mechanisms, tacit knowledge and routines over time in order to achieve the same purpose. Additionally, the people factor acts as mediators for the technology school, while the technology factor acts as mediators for the people school. It is possible that the predominance of use of the different school is highly dependent on the context of the organization. For example, insurance companies rely highly on technological tools for price setting, by establishing a high number of scenarios in order to find out the risk associated to a particular segment.

Box 4: Sensing the market in the case companies

Most of the companies studied rely on gossip rather than facts to sense the market. Aware of that buyers "play" the furniture producers against each other. In one occasion, a sales manager was asked to reduce its price in 30% because one renowned Danish producer could bear that price. The sales manager could not match that reduction and walked away. Some weeks later talking to the sales manager of the renowned producer he found out that they never made an offer to that buyer. An usual practice of buyers which is seldom verified.

Only one company in the group, the component supplier, activates its contacts to other networks to find out new opportunities to work with, either new markets or production processes, which can alter the offering and influence price. The others usually buy what is available in the market and do not participate in product development outside the wooden materials, like in fittings, coatings and design. However, through employee migration, contracting employees from Danish furniture wholesalers, two companies have purposeful gained access to a new network of suppliers and designers. The role of people factor stands out in these cases.

The technology factor has been restricted to in-house use in the companies and in fact only one of the companies studied is able to provide an accurate pricing decision based on its dual goals in pricing of profit and capacity utilization through a computer program developed in-house. Another company has been also aware of the need for market sensing and hired a marketing supervisor, whose responsibility is to skim the market for information. Still, it depends on how the information is applied in pricing decisions, a process that is not clear yet, as it has started for the past 12 months. One furniture manufacturer has access to data on the retailers' warehouse and has the responsibility to keep the product flow. However, this type of information is used only to guarantee the product flow. No internal compilations/combination of past data in order to aid in future pricing activities is made. The remaining companies do not have a marketing mindset, leaving to sales the role to gather information and interpret it. It is not done in a structured and periodical manner, but recently it has been required for the new product offerings to be launched due to the uncertainties linked to the new actors involved.

Depending on the pricing method adopted, one can observe a stronger or weaker participation of the production manager in price determination. Nevertheless, the final pricing decision lies with the sales manager, with the exception of one case, in which a production and administrative manager can overrule the decision of the sales manager. Purchasing managers are not involved in pricing determination in none of the companies, despite the change observed in their activities from manufacturers to wholesalers. The technology factor observed in the component supplier provided greater freedom for salesperson, but still in difficult cases it is the sales manager that has the last world related to pricing.

Thus, although both intangible factors (people) and tangible factors (technology) are relevant resources for sensing the market, people gain relevance from an industrial network perspective as it may provide a broader understanding to pattern of behaviour, reproduced time and time again in the network. Subjective interpretation becomes a clear determinant of market sensing for price determination. Nevertheless, technology acts as a mediator for those decisions.

Negotiation Phase

This stage is where the pricing interaction is resolved. It may be a single meeting or be composed of many meetings before defining an agreement and setting a price for the business exchange. However, due to the characteristics of business to business the client may also be involved in the pricing activities before this stage, which could already delineate negotiation arenas where both parties have the chance to collect information about each other as different employees and functions participate in the process. Thus, the employees' negotiation ability is another important element to take into account for the implementation of the pricing intent (from both sides) and attain the objectives set in the preparation phase.

From a network perspective, negotiation activities involving price become specific to each interaction although still carrying the elements proposed by the authors above, and are also influenced by other negotiations in a company's context. Moreover, negotiations are path dependent. As sellers and buyers learn how each other behave and a negotiation pattern is enacted repeatedly, the same elements feed the previous and next phases of pricing. That is, a routine is established and alternative methods for price setting are excluded. Thus, there is a "dialetic relation where networks provide both the impetus for negotiation and resistance to actors' negotiations and where networks are also constructed and altered as a result of organizations' actions" (Mouzas and Ford 2003, p.6). Mouzas and Ford (2003) propose a model of network negotiations in which three main activities take place: initiating options, infusing options and realizing wise options. These activities are described below:

Initiating options. In a first instance, companies need to find out the path dependence involved into negotiation dynamics. Finding out the context that provides the base for negotiation and how the context is represented. For example, increased volume means lower prices. Another aspect of initiating options refers to the current and potential resources deployed from both parties. The potential resources are usually unknown and require effort in order to reveal them. This brings the element of attitude to this activity: initiative and inertia. The combination of these three elements provides the "space for negotiating in networks", how the space is used is explored in the next activities.

Infusing options. Both parties come with their pricing intents which are translated into proposals or issues. Proposals carry the positive connotation of a wider condition for agreement, and may occur

during product development when price level is already established. Issues arise as some obstacles that need to be overcome for the agreement to take place and although at a first glance is not price related, it indirectly influences the final price and are wisely deployed by able negotiators, like: quality, delivery, terms of payment and services. The parties may also present distinct interests and stances. Interests usually underlie business propositions and are covert, while stances are overt as they represent the posture of the parties in the negotiation table. Throughout the negotiation process the parties may retain or adapt their options, as the previous elements are worked out. As a result, the rationale and the resources required for the deal to take place are shaped.

Realizing wise trades. It takes at least two to close a deal. However, in the real world the other options are also taken into account and therefore, an agreement is only reached when it is better than alternative options. Thus, awareness of the alternative options is paramount to both parties as it defines the range of acceptable agreements. As options or the perceptions of those options change, it also impacts the result of the negotiation. Moreover, if the parties adopt a principle based attitude, the possibility for creating and capturing value is higher than adopting a position-based attitude. Besides a price range that enables value extraction for the value delivered from the seller's side, side-effects may also occur. For example, even if not reaching the price level desired with an important buyer, the reputation effect from being a supplier for this client may open many other doors. Thus, the evaluation of price negotiations should not be restricted to a one-time, one-party event. A final aspect in realizing wise trades is to take into account the rules of the negotiation game, which are expected to be followed. Nevertheless, change is also possible but in addition to requiring another combination of resources or even actors, it must be validated by a counterpart, with the closure of the deal.

Box 5: Negotiation activities in the case companies

In both negotiation processes observed the furniture manufacturers' showed their production facilities to the agents, and a sample of the products. The agents looked curiously for pieces of information like reference customers, which could be seen in one of the warehouses where products were labelled to their final destination. One of the agents brought along a package full of recent catalogues delivered at German homes, showing the types of products they were interested on and mainly prices. In the other case, catalogues of Eastern European suppliers were also spread out on the table. Both furniture manufacturers showed the good working conditions of the plant, the reliability on delivery dates and the quality of the wood used, but no conversion was at sight as the parties initiated their options. The agents made clear the need to have a "bread and butter" product, that is a product which they could attract the attention of the retailer, and according to them the only way to do so, would be through low prices. In one of the cases, the catalogues were spread on the table and the search for a bread and butter product started. A continuous comparison on products, measurements and prices was made, with the agents focusing on low prices, whilst the furniture manufacturer stated the differences in measurements and the type of wood used which justified his higher price. They concluded that the bread and butter product should be outsourced, and changed the attention to different pieces of furniture, in which they claimed to know the new trend and what could sell, also stating the demand for an attractive volume for the furniture manufacturers. In the other case, regulatory issues in approving a bunk bed in France became an obstacle as neither party was interested in taking the costs for the approval. Both negotiation processes lead to further information gathering and communication but neither resulted in trade.

In the second case, however, the furniture manufacturer knew, based on previous talks and performance of the agent, that he was never able to realize the volume he promised, which made any deal very uncertain. As this was one of the companies that has decided not to sell at a loss anymore, no matter the volume, this change could not be captured in time by the agent which could not find another way to attract the furniture manufacturer to do business. In neither case, the managers set any thoughts for the reason that business did not occur. It just did not happen.

Negotiations become very unique to each relationship, and therefore should be followed throughout time as it may show the interdependence of past routines to future outcomes and how changes in those routines are interpreted by the counterpart. Even an unclosed deal can provide important market sensing information that could be applied in other occasions.

Execution phase

The daily activities related to pricing are placed on operational phase. In business-to-business, contracts are closed in negotiation phase, but the order flow occurs afterwards and is usually handled by sales and purchase assistants and not salespersons/purchasers or managers. In this phase most of the episodes of interaction take place. Some of the main pricing activities are: sensing the market, managing pocket prices, assessing primary costs, and communicating and interpreting price moves wisely.

Sensing the market. A whole world of market sensing lies in this phase and should provide the feedback necessary for pricing preparation and negotiation phases. Payment problems or lack of response to rebates for early payments indicate behaviour parameters that must be taken into account in preparation and negotiation phases. As the perceptions of buyers and sellers are important in pricing processes it is important to verify the rumours in the market, and thus separating truth from lies. It is also possible to spot opportunities, not only when deals are closed, but also when they are not. Probably, here lies the most powerful block of valuable information. When a buyer call, gets a quote but does not closes the deal it may be a sign of a better options in the market.

Box 6: Sensing the market in the case companies

None of the companies have a system able to store, organize and retrieve relevant information at the operational relationship level. Rather this information is treated as tacit and is embedded in each employee daily work. However, as many companies are not performing well, many employees choose to flee to other wood related companies and with them, the accumulated tacit knowledge. In one of the companies, as a result of an employee moving to a window manufacturer, the company was down-rated by its main client as the service provided by the new employee could not fulfil the standards. It took three months to go back at the previous rating. The implication for pricing lies in the fact that the power in the negotiation table lessens for the downgraded company.

Agents and sales representatives have a routine for visiting buyers', and have with little co-relation with information from sales assistants. However, in one of the companies studied it was possible to spot a problem in one of the buyer's warehousing due to the abnormal number of complaints from that establishment. The sales assistant notified the sales manager, who personally talked to the Purchasing manager, who at first blamed the furniture manufacturer for poor quality. Eventually, they found out that some employees were stealing different components of packages and claimed they were missing. The buyer was grateful and the fact strengthened the relationship. Although it did not have direct implication in pricing, it increased the knowledge of the problems faced by the client which can be used in a future product offering.

Thus, important information regarding the relationships remains tacit but should be decoded in order to aid in pricing activities, especially throughout the preparation and negotiation phases.

Managing pocket prices. Marn and Rosiello (2000) call attention to the fact that complexity and volume of transactions create a smoke screen to what is happening at each transaction. Usually from an agreed price, volume and competitive discounts, payment terms discount, annual volume bonus, freight, and other revenue leakages are added to result in a distinct and reduced price than previously agreed on, which the authors call pocket price. This leakage is referred to pocket price waterfall and should be scrutinized for each buyer. Compiling the information on each buyer pocket price and the volume sold at each pocket price, managers can visualize a pocket price band where opportunities lie. The width and shape of the pocket price band provides a graphic profile of a business, showing what percentage of volume sells at deep discounts, whether there exist groups of customers who are willing to pay higher prices and how appropriately field discount authority is exercised. As a result, buyers perceived as profitable may lie at the low end of the band. And a change of perception may trigger modifications in a few pricing activities. Moreover, reversing the pocket price waterfall for the buyer's perspectives it is also easier to spot where opportunities lie.

Box 7: Managing pocket prices in the case companies

None of the companies apply the pocket price waterfall in order to have a better knowledge of where price is failing most. When a price structure is set is not questioned again as there is high uncertainty to buyers' reaction to change. In fact, the companies are not aware of their pocket price.

Moreover, one of the companies which delivers to small buyers in Germany freight free for a limit amount, which corresponds to an average of 3 pieces of furniture, has their freight costs based on an average provided by the carrier. This average is certainly optimal for the carrier but not necessarily for the manufacturer. A pattern recognizable in the other companies as well.

A periodical revision of price structures and management of pocket prices bring new knowledge into the company in understanding where pricing opportunities lie and where there are pricing drains.

Assessing costs and revenues. A lack of internal knowledge on how much it costs to produce a product in different points in time can lead to fatal errors in cost perceptions for pricing. Many companies rely only on expected cost calculations without verifying them later on. At the most, they check the first production batches and will renew the cost estimates just before the next negotiation phase. Production and administrative conditions change with time and have a relevant impact on profitability. As Prof. Monroe states: "You have to know the costs so that you can understand the profitability implications of price" (Fishman 2003, p. 93).

Box 8: Assessing costs and revenues in the case companies

Only one of the companies studied re-checks its primary costs on regular basis as it uses the data to its self-developed computer program to determine price, in which profit and capacity utilization are the combined pricing objectives. The company claims to have a marginal difference between their production results and the balance sheet presented at year end. Another company does not have any form of re-checking its costs and it is delaying the implementation of a process as there are other issues more important to take care of. The remaining companies have a re-check procedure a few times until the production process for a series runs smoothly.

Assuming that the same production conditions continue over time when operational margins are so tight may be a defence mechanism for many managers. Realizing that the product is sold at a loss, and that to keep the machinery running is not guaranteeing the survival of the company is a hard fact to face, and requires an immediate change of attitude that many are not ready to take.

Many companies already fail to assess primary costs and revenues by neglecting the importance of pocket prices and continuous verification of ex-post calculations of production processes. Taking price in a relational context, besides primary costs and revenues, it becomes an even harder task to identify the secondary costs and revenues, but they are equally or even more important, as they provide the identification of other elements of value creation for each counterpart, which can be reflected into price and exploited in the negotiation phase.

Communicating and interpreting price moves wisely. In the business world subjective interpretation has the power to cause price wars or avoid them. Communicating prices taking into account the fact that actor's will have different interpretations of this event, is already a step forward into avoiding misreads (Garda and Marn 1993). As communication goes both ways, an actor should not react until it understands the underlying reasons of a competitors' price cut, for example. Subjective interpretation is not random but a consequence of actor's previous experiences of actions, re-actions and re-reactions (Ford and Håkansson 2006), in this manner it becomes easier to find out the others' network pictures, as it is usually a part of the predominant network logic. Thus, companies' pricing activities have the power to show how price changes in the network are interpreted. In short, the interpretation and re-actions could be the same as your own, when facing only one piece of information, namely price, of the product offering.

Box 9: Communicating and interpreting price moves in the case companies

Among the studied companies, price intents are never communicated clearly. One company that went bankrupt in the beginning of 2005 reduced dramatically the price of a piece of furniture as it intended to be the cost leader. It did not communicate to others that the company was not interested in other types of furniture. This triggered a price war throughout all product lines that has lasted up to date and runs the risk to be taken to another arena.

As most of the companies are changing wood types and introducing design to their furniture, new actors (supplier, customers and competitors) arise, who they are not used to deal with. Misinterpretations may occur and lead to a new price war for the new product offerings they are developing. It depends on the lessons learned from pine furniture trade dynamics.

Discussion

Although the pricing processes studied are not examples of best practices, taking a network perspective enables the visualization of void areas, in which pricing processes literature has not handled before as the role of interaction has been undermined by the belief that companies are able to adapt in order to match the changes in the environment. Nevertheless, looking at the main topics of pricing process in the traditional literature, it is difficult to understand the pricing behaviour of these companies.

Throughout the sample, pricing processes present small variations as far as who determines price and the systems used among the companies. Most of them have the same pricing objectives, which differ with what the companies believe they do and what they actually are doing, and use the same reactive pricing method. In traditional products, the process has followed the same pattern. In new projects which target a new market, all of them present the main difference for looking at the market price before its internal costs in the first launching phase. However, there is no evidence that this is a continuous procedure, rather an initial phase of determining the price level. Furthermore, the pricing structure developed throughout the years with the client base is seldom re-analyzed. Bonus, discounts, free freights and other forms of distribution discounts have not been altered despite the fact the companies are in desperate need of improvement in the bottom line.

By taking into account the relational element of pricing process, it is possible to understand why it is so difficult for some companies to change price upwards, whilst downwards is much easier even though the economic rational is not present for such a decision. The subjective interpretation of the managers play an important role in keeping them locked into a certain routine, and even though there is an attempt to breakaway from it, it also requires the validation from the counterpart. Additionally, the relational element of pricing process has been identified beyond the negotiation phase. At the product development stage, clients, suppliers and competitors play a significant role in determining price. The significant difference from prescriptive pricing process is the fact that it is not about a one transaction, but a series of transactions that shape a pattern of behaviour. This behaviour or set of routines feeds expectations to the actors' next transaction. Companies who do not recognize this path dependence, expect that any change in their routine automatically will cause a reaction from clients, suppliers or competitors. A reaction is bound to occur but not necessarily according to their plans.

However, by adopting a network perspective in pricing process two forces co-exist. One that maintains the pricing activities through routines and another one that calls for change. The assumptions and decisions taken in the distinct pricing phases identified influence each other, functioning as restrains or new possibilities for pricing. Thus, it is important to understand the elements in each activity, as far as the resources or tools employed and the actor(s) or community that participate in the process, in order to be able to improve pricing processes in companies. It is not enough to look at the homogeneous market, and the individual firm's pricing objectives, methods and strategies. Thus, due to the network logic and path dependence it is difficult to break away from certain patterns of behaviour. In this sense, if no changes are observed in the pricing processes and routines, a replication is likely to occur eroding the potential of new strategies adopted.

Conclusion

The purpose of this paper has been to introduce industrial networks as a new perspective for pricing processes. Through an interplay between practice and theory, and assuming resource heterogeneity, price becomes an element dependent of the business relationships throughout time. Price is still an important tool to extract value from a transaction, but it is dependent on how the resources from buyers and sellers interact. From an industrial network perspective, the effective price is set in the interaction(s). Three distinct phases are identified for pricing activities from an industrial network perspective: preparation, negotiation and execution. Two of the phases occur as interactions, negotiation and operational, whilst the preparation phase takes place within the companies' boundaries. Although for study purposes these phases are delimited, an overlapping of activities among them is likely to occur. In this sense, there is not a linear timeframe for the distinct phases. Considering continuous interactions one phase is able to feed the other two with important elements

shaping activity patterns and relevant information for future interactions, which may influence pricing activities, as shown in Figure 2.

[Insert Figure 2: Pricing activities and phases from an industrial network perspective]

The preparation phase is the most similar to activities in traditional pricing processes in which objectives, methods and strategy are the tools a company can deploy to determine price. Although these elements still play an important role, the focus change to take into account the objectives, methods, and strategy of the counterparts as well. Marketing sensing is also important for pricing activities as it is through subjective interpretation of the imperfect information available that managers build assumptions for their pricing activities. The negotiation phase is the arena where buyers and sellers practice price in a relational context, where the opportunities, limits are set, learning occurs and trade is agreed upon or not. The execution stage resembles monitoring and implementation from a classical view, however once again the focus is on relationships, not only with the buyer in focus but also with sellers and competitors which may impact pricing decisions within the network. Attention to the activities at this stage is able to leverage the pricing activities in the other stages and enable managers to understand the pricing dynamics in their individual business interactions.

As unique as pricing process in a company can be, it is also reflected in each of the business relationships of a company. Regulations have acted as constraints for companies dealing with each business relationship with an exclusive pricing process. However, in industrial markets the specificity of resource combinations provides companies the possibility to explore latent pricing opportunities, unavailable in business to consumer markets. Thus, from an industrial network perspective pricing process has interaction as the main element, in which time, social context, interdependence and subjective interpretation also matter. Denying the role of these elements is like aiming at a bull's eye with a patch in one eye. With practice, the dart may hit the goal, but a lot of misses are sure to come first.

For further research, as new elements come into play in pricing process from an industrial network perspective, activity systems (Prenkert, 2003) can be deployed in breaking down those elements of pricing activities to understand how they interrelate to each other and shape an activity system for pricing.

A valuable contribution also lies in finding out if companies that perform financially well take interactions into account in their pricing processes. The challenge in such a survey is to make sure that a questionnaire can track down pricing activities per se and not how managers believe they set prices.

Finally, the main pricing activities proposed in this paper are a result of empirical observations in a specific group of companies and should not be interpreted as a rule of thumb. It is likely that distinct network structures should provide a different or added set of pricing activities and even phases. Moreover, studies which enable even information access to pricing activities from both sides, buyers and suppliers, are sure to enhance the framework.

Figures and Tables

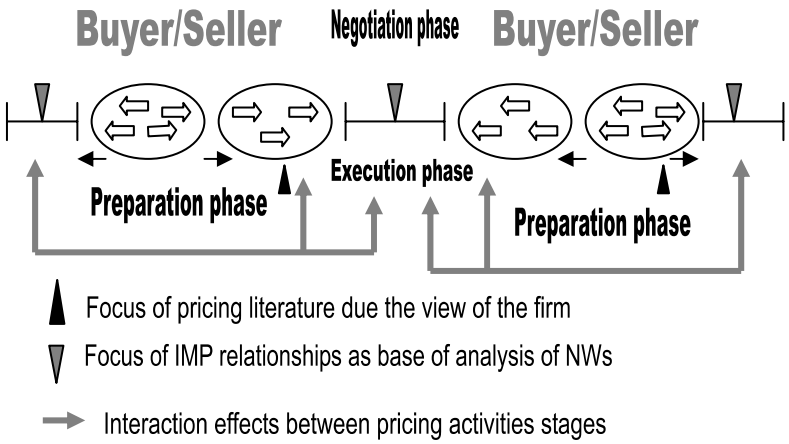

Figure 1: Pricing phases from an industrial network perspective

Basic Perspective

		Proactive	Reactive
Primary Focus	Cost	Cost-plus pricing Contribution pricing	Price-minus pricing
	Demand	Marginal Analysis Trial & error pricing Intuitive pricing	What the market will bear Monopsonistic pricing
	Competition	Product analysis Value pricing	Imitative pricing

Table 1: A taxonomy of pricing methods (Diamantopoulous 1991)

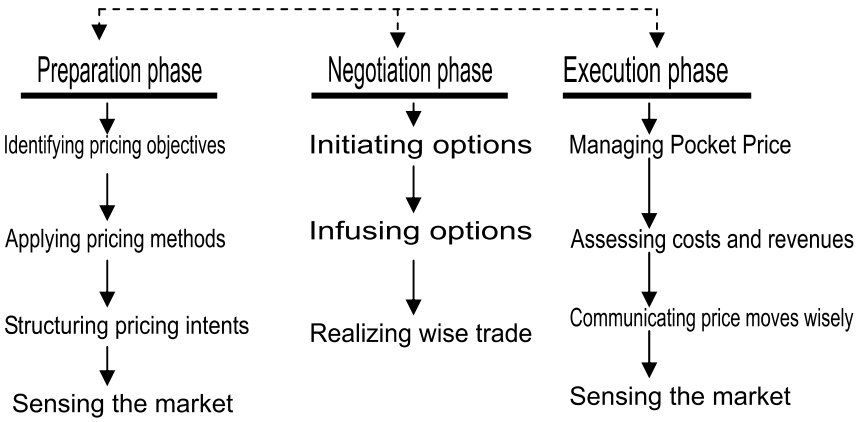

Figure 2: Pricing activities and phases from an industrial network perspective

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