Pricing Strategies in Industrial Markets

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Although price, the classic synchroniser of supply and demand, is central to the study of economics, it has not dominated the thinking of marketing decision-makers. In 1964, Udell [1] found price to be relatively unimportant in the marketing mix. Subsequent studies by Guiltinan [2] and Kelly and Coaker [3] confirmed Udell's findings.

Recent evidence suggests that the rapid rise of energy costs and world wide inflation have altered the importance of pricing decisions. In the mid-1970s Robichaux's replication of Udell's study found that price ranked first among the twelve marketing decision areas [4]. Udell's study, in 1964, placed price sixth among these twelve decision areas [5].

This paper provides an overview of the marketing literature on pricing, with the intention of developing a conceptual framework and a classification system for different types of pricing strategies in industrial markets. This framework strives to provide a more comprehensive basis for developing industrial pricing strategies as well as to identify the most relevant marketing literature appropriate to the needs of industrial marketers.

The first section explores existing literature. Content analysis is used to classify the literature by topic, and identify topics in need of further work. The second section develops a taxonomy of purchasing situations. Using cross-classification of buyers and sellers, different pricing strategies are proposed for different purchasing situations. The summary section links the pricing topics identified earlier to the different purchasing situations. A listing (by topic) of the articles used is provided in the appendix, as a means of providing quick reference to potential users.

The Pricing Literature: An Overview and Classification

Pricing articles can be found in a variety of disciplines, covering a multitude of approaches and spanning over several decades. The current overview is limited to the most recent 16 years. This facilitates an overview of the marketing articles dealing

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with price, over a period which witnessed a change in its importance to decision makers. Many articles dealing with price also appear in general business journals (notably, *Harvard Business Review*), practitioners' and trade journals, as well as in journals of related fields such as finance, accounting, purchasing, organisational behaviour, and economics. This review focuses on the marketing literature.

Since the main focus of this overview is on the application of pricing based on theoretical principles rather than theory per se, the economics literature is not covered. Most trade journals, on the other hand, are largely descriptive, and thus limited in the extent to which they provide a conceptual rationale leading to the decisions reported. Most of the accounting and finance literature is governed by cost considerations rather than marketing aspects and is therefore excluded. Consequently, only marketing literature is used, narrowly defined as consisting of the Journal of Marketing Research (JMR), the Journal of Marketing (JM, and Industrial Marketing Management (IMM) [6].

Tables I and II provide a proxy measure of the relative importance of industrial pricing in the three journals covered. Content analysis was used to classify the articles into four broad categories [7]. The first two, portrayed in Table I, deal with pricing topics which are internal to the company and, therefore, relatively controllable. The next two, shown in Table II, cover aspects which are external to the company and thus relatively uncontrollable. Articles dealing with both internal and external aspects were classified by their primary focus. The articles within each category were also classified further by orientation e.g., industrial, consumer, or both.

Table I. Articles Dealing with Internal (Company Controlled) Aspects of Pricing by Orientation and Years*

		Tacti	cal		Strategic					
Years	Industrial	Consumer	Both	Total	Industrial	Consumer	Both	Total		
1964-									····	
1969	_	2	4	6	_	1	2	3	9	
1970-										
1974	4	5	2	11	2	2	_	4	15	
1975-										
1979	6	2	2	10	3	-	1	4	14	
TOTAL	10	9	8	27	5	3	3	11	38	

^{*}A detailed listing of the articles used to compile this Table is given in Appendix A. Internal factors (Table I) include:

Tactical pricing aspects. This includes topics dealing with methods and models such as competitive bidding, decision trees, product line and product life cycle pricing, cost oriented methods, demand and competition oriented methods, etc.

Strategic pricing aspects. This includes topics dealing with the overall pricing strategy for a company rather than specific methods or models. For example, the role of price in the marketing mix and its importance to long-range profitability are discussed.

Table II. Articles Dealing with External (Company Uncontrolled) Aspects of Pricing by Orientation and Years*

	_	Demand (C)	Environment (Economy/Industry)								
Years	In- dustrial	Consumer	Both	Total	In- dustrial	Consumer	Both	Total	GRAND TOTAL			
1965-		и										
1969	_	1	_	1	1	5	5	11	12			
1970-												
1974	_	19		19	2	1	5	8	27			
1975-												
1979	2	5	1	8	2	1	3	6	14			
TOTAL	2	25	1	28	5	7	13	25	53			

^{*}A detailed listing of the articles (by journal, year and author) used to compile this Exhibit is given in Appendix B.

External factors (Table II) include:

Demand and customer aspects. This includes topics dealing with experimentation, price-quality perceptions, unit prices, psychological pricing, surveys and statistical analysis of demand, etc.

Industry and economy aspects. This includes articles dealing with pricing objectives, the relevance of competition, legal aspects of pricing, analysis of an industry's pricing structure, etc.

Table I suggests there are twice as many articles dealing with tactical aspects than articles dealing with strategic aspects. In fact, strategic aspects received the least attention (in terms of the number of articles written) of all four categories (both Tables). Only eleven articles appeared on strategic aspects in JM, JMR, and IMM over the period surveyed, compared to over double this number in each of the other three categories.

It is also possible to assess the importance of industrial pricing, by using the number of articles as a proxy measure. Just as the contention that the field of industrial marketing suffers from relative neglect in marketing literature has been refuted [8], so has contention that pricing is relatively less important in industrial markets [9] been questioned by our proxy measure. Out of all the articles dealing with internal aspects of pricing, over one half deals with industrial marketing aspects or has implications of relevance to industrial marketers. Specifically, Table I shows that 15 out of 38 articles are industrial and 11 additional ones have relevance to industrial marketers, for a total of 68 per cent.

This situation changes somewhat when examining Table II. Out of 53 articles, only seven deal directly with industrial marketing, and an additional 14 deal with both industrial and consumer markets, for a total of 40 per cent or less than half. The overall proportion of industrial articles in Table II is affected by the relative lack of articles in the category dealing with demand-customer aspects. Only three out of 28 articles in this category deal with industrial buyers.

The timing of the articles in terms of publication dates, is also of interest. The majority of the articles dealing with industrial pricing tactics (six out of ten, Table I) appeared in the last five years and all ten appeared in the 1970s. The same can be observed with respect to articles dealing with strategic aspects of industrial pricing: all five appeared in the last decade (and two of these in 1979; see Appendix for details). The timing of articles dealing with external aspects is similar and concentrated in the last decade. Six out of seven articles dealing with industrial pricing appeared in the last decade. The situation in both exhibits remains the same when articles of interest to both consumer and industrial markets are counted.

This conclusion must be modified by the fact that IMM began publication in 1973. Nonetheless, the lack of industrial pricing articles in the first six years surveyed, (there are no articles published in three of the four categories of Tables I and II) still implies that industrial aspects of pricing only emerged as important in the 1970s.

Obviously the most striking conclusion from the above exhibits is the fact that the marketing discipline (as measured by article counting in the three journals reviewed) focuses attention on the seller's perspective of pricing in industrial markets. It may be that while the economics discipline neglects the supply side of the demand and supply interactions [10], marketing neglects the demand side in the industrial pricing area. However it must be emphasised that the purchasing literature has not been surveyed above. On the other hand, Corey [11] asserts that the importance of price in evaluating the performance of purchasing executives is relatively unimportant, when compared to other factors (e.g., the costs of a shutdown due to raw materials shortage). Kotler and Levy reaffirmed this lack of interest in the article titled, "Buying is Marketing Too" [12]. Perrault and Russ [13] found price to rank third out of eight seller characteristics in semiconductors and in five other industries. Their work was conducted with purchasing agents, reconfirming Corey's [14] conclusions.

The majority of articles dealing with industrial pricing consider two subjects: bidding and industry-wide aspects of pricing. These two subjects fall under two of the four categories covered by Tables I and II. Bidding falls under tactical decisions (Table I), and industry-wide aspects belong in the second category of Table II (economy and industry environment). There is a relative dearth of articles dealing with strategic pricing aspects and with demand aspects.* The following section attempts partially to correct this relative lack of attention. It does this by linking aspects of strategic pricing with those of demand. In this way it develops a strategic

^{*}A survey of pricing articles in the Harvard Business Review (1950-1979) reconfirms these findings.

approach to pricing for different purchase situations, based on a taxonomy of industrial buyers and sellers.

A Strategic Framework for Pricing Decisions

As indicated above, the relative lack of articles dealing with the industrial buyer can be attributed, at least partially, to the fact that price is only one of several components in the overall negotiations between industrial buyers and sellers. The following framework deals with that question by trying to identify purchasing situations within which price will be of either high, medium or low importance. The rationale for this approach stems from the view that specific purchasing situations require different emphasis on price as a determining factor.

In order to achieve such a taxonomy, the framework first identifies three broad segments of industrial buyers, based on their use of the items purchased. The sellers confronting each of these segments can further classify buyers by their perception of the buyer's strength relative to their own. As a second step the framework requires a classification of sellers. The sellers are classified into segments by the major products they offer for sale.

The different combinations of buyers and sellers yield a taxonomy of buying situations. Within this taxonomy, a seller can discern whether price is an important variable in his dealing with a specific buyer or a variable of secondary importance.

Industrial buyers can be broadly classified into three buyer segments.

Producers

The bulk of purchasing in this segment is used to manufacture directly, assemble, and convert the purchased materials into a saleable market offering. At times the purchases are indirectly related to the end product, as in the case of purchases which merely facilitate the operations described above. The first category of products used for manufacturing, is treated as a direct cost, (per unit produced). The latter usually constitutes overhead or indirect costs.

The first category, which is charged as direct costs to the market offering, constitutes a constant cost per unit sold and therefore allows the buyer less flexibility in price negotiations. The second category constitutes an indirect cost. This translates into variable cost on a per unit basis, giving the buyer a greater degree of flexibilty with respect to price negotiations. More specifically we can argue that products which directly impact the costs per unit sold will have a more inelastic demand than is the case with products impacting indirect costs per unit.

Re-sellers

The bulk of purchasing in this segment is used for direct re-sale with relatively little or no physical alteration. At times, as in the producer's segment, re-seller purchases are indirectly related to their end goal. These purchases are mainly designed to facilitate re-sale. Re-sellers, by and large, provide time, place, and possession utilities, as compared to form utilities [15], and the cost of goods they purchase for re-sale are constant per unit. The cost of their facilitating functions are variable per unit and charged against their total operating expenses.

Government and Other Non-Profit Organisations

Unlike the first two segments, government agencies and other non-profit organisa-

tions generally follow different accounting procedures. The distinction between fixed and variable cost per units is not prevalent or of prominent importance. In many cases, the ultimate "efficiency" criteria is the overall cost per customer benefitted or served, rather that the cost of the final offering on a per-unit basis. Thus, a feasibility study for a new highway would generally involve assessing user benefits as the denominator, while using expenses as a numerator.

Where mandated by law, the relationship of costs to benefits is less important, with the excess cost being recognised as a necessary "public good". Thus, for example, the US Census of Population could probably be replaced by a cheaper (and simpler) sampling plan which would yield comparable accuracy. Nonetheless it is conducted every decade to comply with the United States' constitutional mandate.

The three segments have certain similarities and dissimilarities in their purchasing activities. Thus, for example, most governmental agencies and many non-profit organisations operate annual budgets and their purchasing decisions are governed by budget authorisation requests and an "affordability" criteria. Affordability tends to depend on the publicly allocated annual budget rather than on business-like criteria such as the organisation's "profitability". Consequently many government agencies, operating under the public's eye, must purchase by accepting the lowest bid forwarded. Where bidding is not feasible or mandated, a contract-negotiations type of purchasing is prevalent. This need not be the case in the private sector, consisting of the first two segments. Although they can, and indeed do, use bidding and contract negotiations, these are not subject to public scrutiny nor mandated by law. Therefore, a company may decide to award a contract or accept a bid from a seller who did not give the lowest price. This fact alone has important ramifications for industrial sellers, when considering the strategic importance of price.

On the similarities' side purchases in all three segments are initiated by buying organisations which have individual requirements. It is, therefore, common to have an entire marketing mix custom tailored to the individual industrial buyer. Purchases are of relatively large dollar volumes and purchasers are concentrated both by the small number of buyer units and their geographical location. These factors emphasise the importance of direct selling instead of the mass media common in consumer markets. It is possible to further sub-divide these three segments on the basis of the relative negotiating strength of buying organisations. Jain and Laric [17] proposed that buyers' strength can be evaluated in terms of the following factors:

- (a) size of organisation (as compared to industry average);
- (b) purchasing volume in the past;
- (c) size of future expected orders:
- (d) credit standing;
- (e) dependence of the seller, etc.

After the buyer's strength is evaluated on each of the exemplified five factors (using an ordinal scale for weak/strong) then weights are assigned to each factor. A total score for the buyer is derived by multiplying the scale value by the assigned weight and summing across the factors. For simplification the outcome can be classified into "weak", "medium" or "strong". The weaker the buyer, the easier it would be for the seller to dictate price, and the less likely for the buyer to negotiate hard,

Table III shows a framework to enable a seller to classify purchasing situations in industrial marketing. The three industrial buyer segments are shown in the first column. The other columns in Table III classify the different major product lines of sellers [18].

Industrial buyers generally distinguish between capital purchases and expense items. The purchasing environment for these two groups differs in terms of the way the buyers view the costs associated with acquiring them, and consequently the emphasis they put on price. This distinction is reflected in Table III.

Capital items can be further subdivided between major installations and accessories. Installations are viewed as more important by the buyers with consequently greater top management involvement. Also, the costs and benefits accruing from capital purchases are spread over many years. This means that it is more relevant for sellers of capital products to incorporate "life cycle costing" [19] into their bidding or contract negotiations.

Expense items can be subdivided between raw and natural materials and cultivated materials. Processed materials can be grouped into components, supplies and services. The involvement of buyers' top management is less important in expense item purchases than in capital items. Such executives will get involved only when the overall amount to be spent is high, where it is a new purchase or where the items purchased are of crucial importance to the buyers' assembly line operations. In periods of inflation buyers are interested in long-term arrangements whereas sellers may be reluctant to grant such contracts. In such situations, top level executives (representing both buyer and seller) may get involved in negotiations.

Table III also classifies purchase situations in two ways:

- classification of the purchase decision-making process most likely to be used by the buyer, depending on their experience and hence their strength [20];
- (2) classification of the types of cost involved in the purchase in terms of unit of output sold by the industrial buyer [21].

Decision-Making Process

The decision-making process used by the buyer may be viewed as involving one of three levels of decision complexity.

New Task Purchasing

This is the most complex level and would occur when the items to be bought are new to the buyer. The buyer must initiate a comprehensive search of sellers' price lists, specification, trade-offs, etc. At times, the buyer must even select the parameters for decision making, as well as the ultimate choice criteria. Top management is likely to be involved both in determining the criteria for decision making as well as the final decision itself when the amount of money or risk involved are perceived to be high.

Modified Re-Buy Purchasing

This process involves an interim complexity and would occur when buyers have had prior experience with purchasing the item in question. However, due to the amount involved, the associated risk, the infrequency of past purchases, or another disconcerting aspect, the buyer decides on a renewed search. This renewed search is likely to be less comprehensive than in a "new buy" situation and will involve lower-level echelons from the buyers' organisation.

Routinised Re-Buy Purchasing

This process is the least complex and is used when the items are purchased frequently, and where past performance and buyer/seller relationships have been satisfactory. In many cases, this process can be automated, (utilising such standard guidelines as optimal EOQ calculations). A seller, in a continuing relationship, would find the last (routinised re-buy) to be the most attractive and consequently may view the first as the least attractive. A buyer is less likely to consider a change of supplier when using routinised re-buy decision making than in the case of new task buying.

Classification of Purchase Costs

The purchase price of the product can be classified according to its effects on the direct and indirect costs of the buyers' market offering. This also allows the seller to gauge the buyers' sensitivity to price.

Direct Cost per Unit

Buyers are likely to be most sensitive to changes in price when such changes must be passed on to their customers in the form of higher prices. This would be particularly true if the buyer has grounds to believe that his competitors do not face the same cost increases, thereby allowing them to have a competitive advantage. Direct cost per unit is indicated as "a" in Table III.

Indirect Cost per Unit or Appropriated Government Budget

Buyers will be less price sensitive when the price of their overhead is raised, since this is not directly reflected in the prices of their end products. A new improved machine can actually reduce the costs per unit of the end products, "b", Table III.

In the government buyers' segment, "b" represents a lesser concern with price due to the fact that the budget for the purchase in question has been approved. So long as the bids are below the approved budget, the government buying organisation is likely to be less concerned with the price of the purchase.

New or Unappropriated Budget

The third category of costs classification is relevant to government markets where a distinction must be made between approved budgets, in which case the purchase will be viewed by the government as overhead, and unappropriated or proposed budgets. In the latter case a large budget request in periods of retrenchment could jeopardise the chances for a successful appropriation altogether, "C", Table III.

The combination of the three levels of purchase decision complexity and the three ways of viewing costs (from buyers' view-point) yields a matrix which gives a measure of the importance of price in negotiations. This is portrayed in Table IV.

The importance of price is highest for industrial buyers who use new task buying for purchases which directly affect the costs of their end product. Buying raw material for several years at a time may involve new task buying (first row, Table IV). The costs of these raw materials are passed on to the buyer's customers and thus price will be viewed as a critical issue in the purchase negotiations.

Table III. A Taxonomy of Strategic Purchasing Situations in Industrial Marketing: A Seller's Perspective*

Industrial buyers by major market		Major product classes of sellers										
segments and relative strength as perceived by	Cap		ns ed and semi-process	ed materials								
seller	Machinery											
Major installations (factories)	and accessory equipment	natural (mining)	Cultivate (farm)	Con	nponents	Supplies	Services					
Producers Perceived as:												
Strong	Modifiedb			tinea	Routinea	Routinea	Routineb	Modifiedb				
Equal Weak	New ^b New ^b	New ^b New ^b		ifieda :wa	Modifieda Newa	Modifieda Newa	Modified ^b Modified ^b	Modified ^t Modified ^t				
Resellers												
Strong	Newb	Newa	Mod	ified ^a	Modified ^a			Modified				
Equal	Newb	Newa	_	:W ^a	Modifieda	Modified ^a		Modified				
Weak	Newb	Newa	No	;w ^a	Newa	Modifieda	Modified ^b	Modified				
Government												
Strong	Modifiedb/		= Mod	ified ^c	Routine ^{b/c}	Routine ^{b/c}	Routine ^b	Routine ^{a/}				
Equal	Newb/c	Newb/c		:w ^c	Modifiedb/			Modified ^a				
Weak	New ^{b/c}	New ^{b/c}	No	:w ^c	New ^{b/c}	New ^{b/c}	New ^{b/c}	New ^{a/b}				

^{*}Cost on a per end-product basis.

New = New Task Buying; Modified = Modified Re-buy Buying; Routine = Routinised Re-Buy Buying.

^aDirect (constant per unit) cost; ^bIndirect (variable per unit) costs; ^cNew (unappropriated) budget.

Table IV. Strategic Importance of Price in the Negotiations between Industrial Buyers and Sellers: A Buyer's Perspective.

		Nature of the Costs Involv	red
Complexity of purchase decision	Direct cost per unit (a)	Indirect cost per unit/or appropriated budget (b)	Government unappropriated budget (c)
New task	Highest	High	Highest
Modified re-buy	Medium	Medium/Low	Medium/High
Routinised re-buy	Low	Lowest	Medium

The importance of price would also be highest in government markets when engaging in new task buying where the budget for the purchase in question had not been approved. In such cases price becomes a major factor for the appropriations committee dealing with new budgets, (see first row, Table IV).

Summarily, as shown in Table IV, it is postulated that the importance of price will decrease with the increasing complexity of the purchase decision and vice versa. Furthermore, it is proposed that price will tend to be more important in transactions which impact direct costs per unit than in those which impact indirect costs per unit. In the case of a government buyer without an approved budget, the importance of price would be somewhere in between these two.

The final step in assessing the importance of price involves combining the seller's view (Table III) with the buyer's (Table IV). The seller's view must consider the importance attached to price by the buyer, as well as the buyer's strength. (The stronger the buyer the easier it will be for him to dictate an agreement). Obviously, the weaker the buyer, the less likely he is to yield to the seller. An example would help clarify the use of the two Tables.

Table III indicates that when General Motors (a strong buyer for most sellers) buys an installation, it will be viewed as a purchase decision of modified complexity; since installations affect GM car costs indirectly, a combination of "modified" is indicated in Table III. Turning to Table IV, the reader can see that for a combination of modified re-buy and indirect cost the buyer will view price as being of medium/low importance. Specifically, the General Motors' buyer will look for other attributes of the installation as being more important than price. Since GM is perceived as a strong buyer it will negotiate with sellers. However, these negotiations will not focus on price as the most important aspect of the purchase.

A smaller buyer (weak in relation to the seller) will view the purchase of the same capital item differently. In Table III we find the combination "newb" for this situation and in Table IV this combination yields a "high" importance rank for price. Although the weak buyer may not be able to negotiate effectively, to the extent that he does, price will be of high importance. The reader can probably continue and examine the various cell combinations in Tables III and IV further to explore the

strategic importance of price to buyers and sellers in different purchase situations.

Shifting attention to other buyer segments, one can postulate that industrial sellers engaged in selling supplies (routine modified, Table III) would find that price is generally of medium to lowest importance to their buyers, (Table IV), Industrial sellers of accessories and machinery would find price to be of high importance to small and medium producers, and of medium importance to large ones. Price would be of the highest importance to government agencies perceived as weak. relative to the seller, while being of medium to high importance for government units perceived to be strong. This is especially true when their budgets are not yet appropriated.

Re-sellers of all strength categories would perceive price to be very important since most of their purchases are intended for re-sale and their costs must be passed on. When prices are increased to all re-sellers (rather than only a few) the relative importance of such price increases goes down. The framework emphasises relative price increases (e.g. relative to buyer's competitors), rather than price increases which affect the entire market in the same manner. Obviously the ARAMCO oil companies do not attribute the same importance to price hikes which affect all of them equally as they do to price hikes which only affect one of them.

Summary

In industrial marketing, as in courtship, it is often hard to distinguish between cause and effect in a continuing relationship. At times, price can be the single most important variable to influence a sale. At other times, it may be just one of several product/service attributes, and at yet other times, it may be almost unimportant. From a strategic angle, it depends on the industrial environment, the continuing relationships between buyer and seller, the buyer's need for the purchase and the seller's need for the sale.

This paper proposed a framework for a strategic view of pricing, emphasising when and for which buyers' segment the price variable is important. In so doing, this article strives to aid industrial negotiators by highlighting the importance of price.

The overview and taxonomy of the existing literature revealed a relative gap in the area dealing with industrial buyers' perception of price as well as in the area dealing with the strategic environment of industrial pricing. The proposed framework which consists of Tables III and IV, combines these two topics. The proposed classification of industrial buyers and sellers yields different pricing situations and different strategies for pricing.

Several guidelines can be offered to the industrial executive involved in pricing decisions. When pricing decisions are of either high or paramount importance to the segments served by a given seller, the pricing literature covering tactical considerations is to be studied carefully (Appendix A offers a listing by author and journal).

In situations where price is of medium importance, the need to examine articles dealing with demand (Appendix B) becomes relevant. Specifically, if the seller wants to ensure that his customers do not change their perceptions of price, he may benefit from looking into articles dealing with price thresholds, psychological pricing, etc. Although these deal with consumer markets, an increase in the price of an industrial product which does not take price thresholds into account may cause a shift from a

routinised re-buy process to a modified or new task buying. This will, of course, change the nature of the relationship altogether.

Obviously where buyers do not view pricing as an important component of the purchasing process, the need to emphasise other marketing mix components is clear. In such cases, pricing may not be of consequence at all.

Finally, several propositions can be postulated regarding the tactical as opposed to the strategic importance of price in industrial markets. At least some of these propositions can be examined by measuring actual price elasticities and cross-elasticities in industrial markets. Alternatively an approach which examines buyers' perceived trade-offs [23] and desired benefits can also lead to some industry-specific answers which could help industrial marketers make better pricing decisions.

Price would tend to increase in importance when:

- the item is offered for the first time (a new task buying situation);
- the company needs to raise prices (a return to modified re-buy situation); (2)
- competition reduces price and makes direct offers to one's buyers: (3)
- the products involved are directly input into the end product of the buyer, and their cost is therefore fixed per end-product:
- the buyer sells to a government agency which is primarily concerned with (5) price.

Conversely, price will tend to be less important when:

- the item is bought on a regular basis (routinised re-buy pricing); (1)
- the seller has a high/unique reputation and product's failure to perform (2) may cause severe handicaps to the buyer;
- the purchase represents an overhead or indirect cost to the buyer; (3)
- the cost of the item can be easily concealed in an overall budget as in the (4) case of a small machine within a large budget;
- (5) in government markets, when the budget was not yet appropriated.

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Appendix A Articles Dealing with Internal (Company Controlled) Aspects of Pricing by Year of Publication, Journal, Orientation & Author

		Tactical			Strategic				
Year	JMR	JM	IMM	Total	JMR	JM	IMM	Total	Tota
1964	Morgenroth (c)	Abrams (c)		2		Udell(c)		1	3
1966	- ,,,	Wentz (c)		1		• •		0	1
1968		Darden (b)		1	King (b)				
					Lynn (c)			2	3
1969	Barclay (b)	Stout (c)		2				0	2
1970		Frey (a)			Churchill/Ford/				
		Goodman/			Ozanne (b)			1	3
		Moody (c)		2					
1971	Frederic (a)			2	Churchill/Ford/				
					Ozanne (b)			1	2
1972	Barker (b)			1	Parsons/				
					Price (a)			1	2
1973		Oxenfeldt (b)		1				0	1
1974	Lilien (c) Neyin (b)	Haynes/Tothe (a)		3				0	3
1975	Reinmuth/	Brooks (b)						0	4
	Barnes (a)	Jones (b)		3					
1976		Sewall (a)		1		Guiltinan (c)	Haas/		
							Wortruba (a)	2	3
1977			Oxenfeldt (a)	1				0	1
1978	Simmond/ Slater (a) Anglemar/ Stern (a) Monroe/	Fogg/ Kohanken (c)		4				0	4
1070	DellaBitta (b)	Donatha (1)					7-1-771-4		
1979	Burt/Boyette (a)	Brooks (a) Monroe/ Zoltner (b) Stephenson/ Cron/Frazier (c)		4			Jain/Laric (a) Brown (a)	2	6
Total	11	15	1	27	6	2	3	11	38

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Appendix B. Articles Dealing with External (Uncontrollable) Aspects of Pricing by Year of Publication, Journal, Orientation & Author

	De	mand (Customers)			Environment (Industry/Economy)						
Year	JMR	JM	IMM	Tota	JMR	JM	IMM	Total	Total		
1964			_	0	Mallen (c)			1	1		
1965				0	Darnell (c)	Bauer/Cunningham Wortzel (b)	/	2	2		
1967				0		Slater/Mossman (c) Dickinson (c)		2	2		
1968	McConnel (b)			1		Werner (c) Miller (c) Hammond/Anthon Christensen (a)		3	4		
1969		· · · · · · · · · · · · · · · · · · ·		0	Brown (b)	Dardis/Skow (b) Morris/Bronson (b)		3	3		
1970	Peterson (b) Kamen/Toman (b)	Lambert (b)		3	Snowbarger/ Dunkelberg (c) Kotzan/Braucher (c)		2	5		
1971	Gabor/Granger/ Sowter (b) Gardner (b) Monroe (b) Monroe (b) Kamen/Toman (b)			5	Wheatley/ Gordon (c)			1	6		
1972	Granger/Billson (b) Barker (b) Stapel (b) Lambert (b)	Monroe/LaPlaca		5		Houston (b) Mossman/Fischer/ Crissey (c)		2	7		
1973	Monroe (b) Bettman (b) Shapiro (b)			3				0	3		
1974	Anderson(b) Curan(b) Isakson/Maurizi(b)			3	Houston/Weiss (a) Wildt (a)	Swan (c)		3	6		
1975	Nystrom/Tamsons/ Thams (b)		Thompson (a)	2			Allen/Tatham/ Lambert (a)	1	3		
1976	Charlton/ Ehrenberg (b)		Kelly/Walker (a)	2		Adler/Hlavacek (c)	Mettawally/ Davy (a)	2	4		
1977	Russo (b) Erskin/Barron (c)	Goldman (b) Willenberg (b)		4		Phillips/Stern (c)		1	5		
1978				0		White/Cundiff (c)		1	1		
1979				0	Simon (c)		_	1	1		
Total	22	4	2	28	9	14	2	25	53		