Industrial product pricing: a value-based approach

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Introduction

Of the three main approaches to pricing used in industrial markets – cost-based, competition-based and value-based – the third is considered superior by marketing scholars and pricing practitioners. But only a few industrial firms have adopted it: cost-based and competition-based approaches continue to play a dominant role in industrial pricing practice (Coe, 1990; Shipley and Bourdon, 1990; Noble and Gruca, 1999).

The marketing and pricing literature is silent on how organizational and behavioral characteristics of industrial firms may affect pricing orientation (Ingenbleek, 2007) and on how pricing orientations may affect the final price-setting process for industrial products. To address this phenomenological gap, we designed a qualitative inquiry based on semi-structured interviews with managers in small- and medium-sized US industrial firms that have successfully adopted value-based pricing. We also interviewed managers in similar firms that have not adopted this pricing approach. By probing the ''lived worlds'' of these executives, we hoped to generate a grounded theory about the organizational practices that contribute to or hinder the development and implementation of modern pricing practices and how they are used in the price-setting process in industrial markets.

Our results reflect similarities and differences in the experiences of managers in industrial firms using all three pricing orientations. They contrast firms and leaders with respect to how they organize for pricing, manage the pricing process, make product-pricing decisions, manage the transition to more advanced pricing orientations, and develop internal capabilities to face uncertain and ambiguous decisions.

Research design

Theoretical foundation

Our work was informed by two key management theories – organizational theory and the theory of the firm – as well as by pricing literature focused on firm pricing orientation. Among the vast array of derivative theories that surround organizational theory and theory of the firm, we focused, relative to the first, on organizational decision-making theory (March, 1994), and, relative to the second, on the behavioral theory of the firm (Cyert and March, 1992) and the resource-based view of the firm (Wernerfelt, 1984).

Methodological approach

We conducted a qualitative study using semi-structured interviews to develop a grounded theory (Corbin and Strauss, 2008) about how organizational factors affect the adoption of a pricing approach in industrial firms. We sought a better understanding of how managers in these firms make pricing decisions and what roles they play in the firm's pricing process.

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Sample

Our sample consisted of 44 managers in 15 small- and medium-sized US industrial firms. Relying on the principle researcher's professional network and advice from the Professional Pricing Society, we identified over 36 firms in three industries: building materials, transportation products, and plastics products.

Seven firms were small, defined by the Small Business Administration 2007 size standards by industry (www.sba.com/size) as having between 50 and 380 employees; and eight were medium-sized with between 900 and 2,200 employees.

Six firms (18 interviews) adopted cost-based pricing, five (14 interviews) used competition-based pricing and four (12 interviews) relied on value-based pricing. Respondents included 15 CEOs or top executives, 18 commercial managers with full or partial responsibility for pricing, and 11 finance managers with decision-making authority. Interviews were conducted in ten US states.

Data collection

The primary method of data collection was semi-structured interviews conducted over a three-month period from April to June 2010. A total of 37 interviews were conducted in person at the respondents' place of employment, and seven were conducted by telephone. The interviews, averaging over 60 minutes, were digitally recorded and subsequently transcribed by a professional service.

Data analysis

Consistent with a grounded theory approach, data analysis began simultaneously with data collection. The audio recordings of each interview were listened to several times and the transcripts of each interview read repeatedly. Three stages of rigorous coding then ensued (open, axial and selective coding). The process resulted in a reduction in the number of categories from 92 to 40, yielding seven major themes and capturing 781 of the total ''codable moments'' out of the 2,554 originally identified.

Findings

Our data reveal that the decision-making process and the factors influencing price-setting and price-point definition for existing and new products in US small- and medium-sized industrial firms varies dramatically by pricing orientation, i.e. value, competition and cost. We discovered stark differences in the locus of the pricing function, the nature of the pricing process, the organizational structure, the diffusion of pricing capabilities, and in leaders' behaviors in firms with a value-based pricing (VBP) orientation versus those with cost- or competition-based orientations (CBP and COBP).

Finding 1: firms using value-based pricing support their product-pricing decisions by relying on formal market research, scientific pricing methods and expert recommendations, while those using other orientations (cost or competition) rely on experience, prior knowledge, gut and intuition

Three out of four firms in our sample that had adopted value-based pricing conducted formal quantitative market research to calculate customers' value and to derive final pricing points. These firms used scientific methods, such as conjoint analysis, KANO, and customer acceptance testing, to define a range for each price point. Respondents claimed that these methods reduced the level of uncertainty when managers defined the final price point, thus

> **"We discovered stark differences in the locus of the pricing function, the nature of the pricing process."**

increasing the level of rationality in the process of setting product prices. Figure 1 illustrates the process for defining a value-based price point, highlighting the role of internal experts and consultants from ''central'' or center-led pricing teams as critical to supporting, testing and validating pricing decisions.

As illustrated in Figure 2, of the six firms which used cost-based pricing, most developed advanced cost models – and all used margin targets – to inform product price-setting decisions. When faced with uncertainty, managers of all firms reported using prior knowledge and experience, and half admitted to relying on intuition and guessing in order to define the final price point (see Figure 3). Most of these managers (five out of six firms) characterized their pricing process as ''unscientific'' despite the fact that it was based on financial data and was formulaic in nature. Table I provides evidence of the scientific versus unscientific nature of product-pricing processes in these firms.

All the firms in our sample that used competition-based pricing similarly relied on prior knowledge and experience as well as on intuition and gut feeling to define a final price point. Our data, as reflected in Figure 3, demonstrate that managers in these firms typically

Figure 1 Price point definition process for value-based pricing

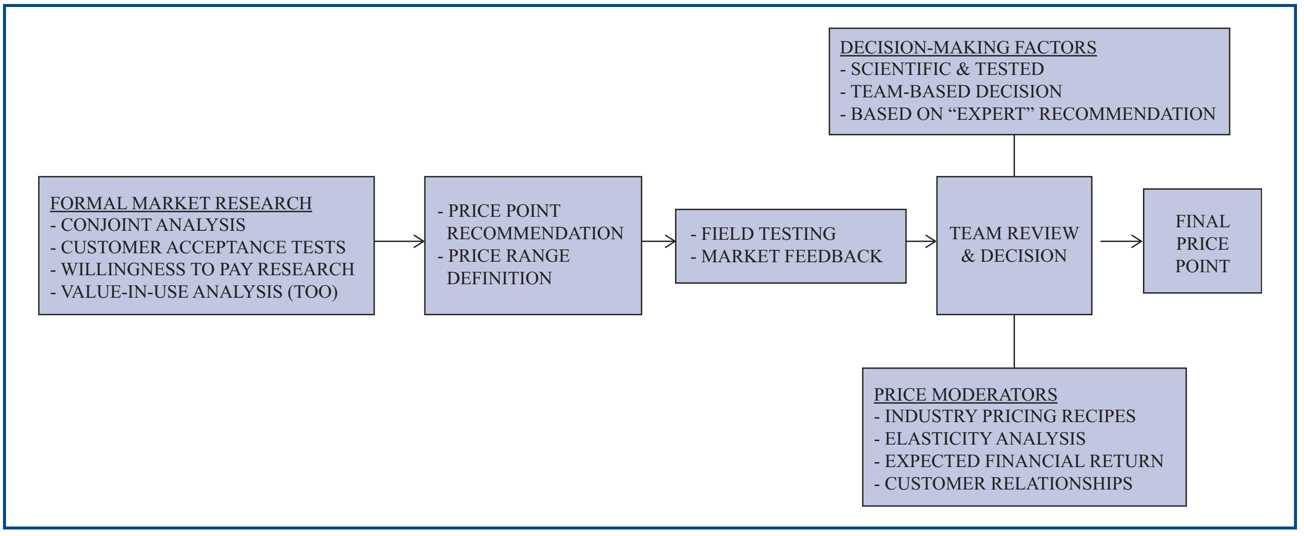

Figure 2 Product price point definition process for cost-based pricing

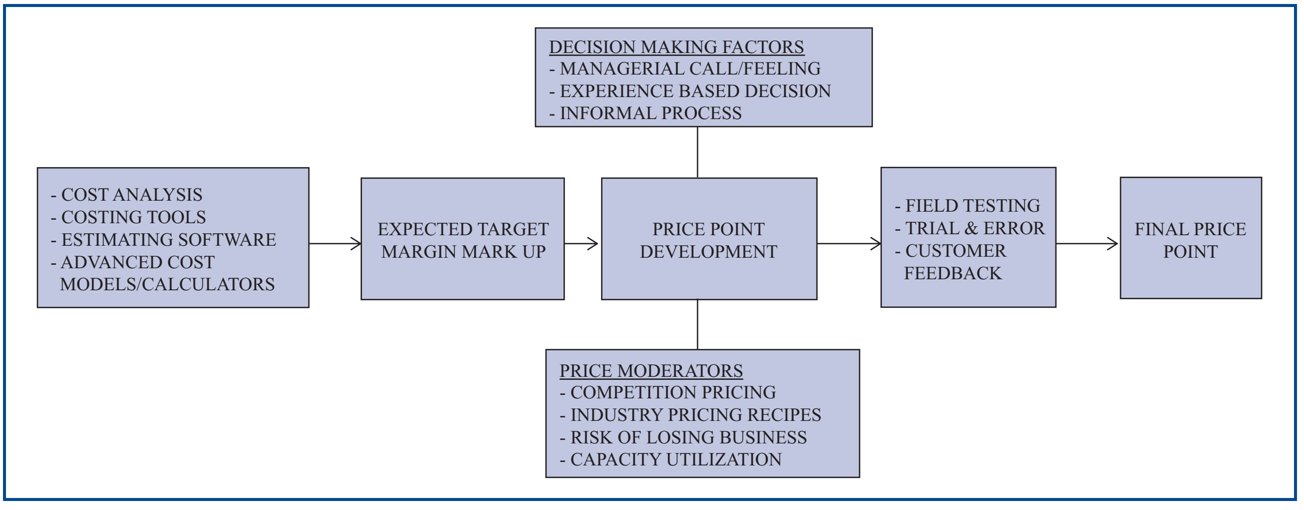

Figure 3 Product price point definition process for competition-based pricing

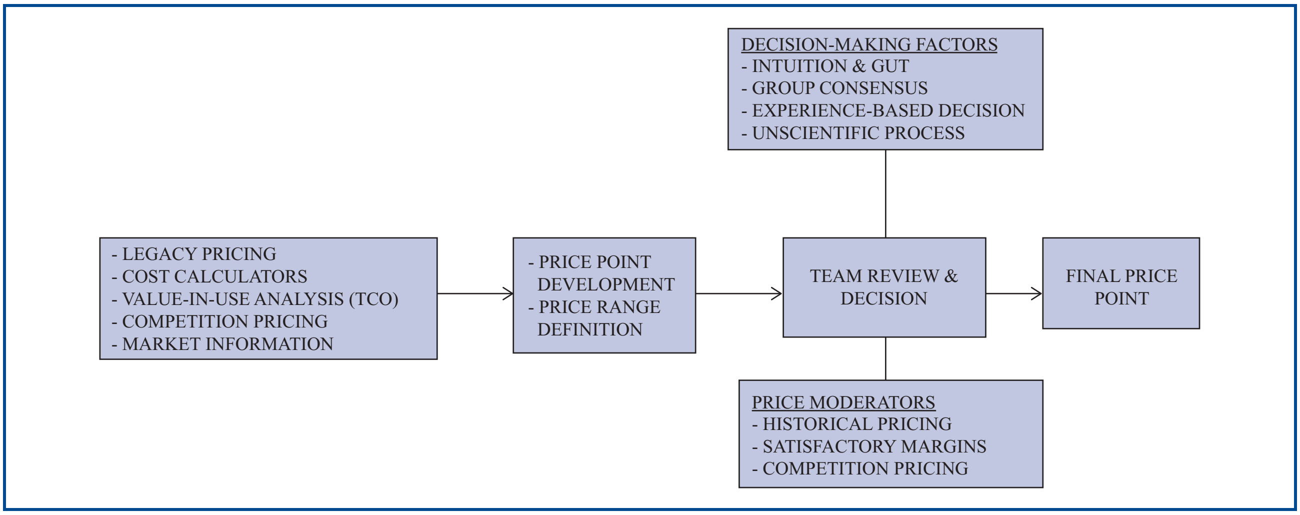

Table I Differences in the decision-making process between firms that used value-based pricing and those that did not

Pricing method and function	*Interviewee comment*
Scientific decision-making process	
VB1-SM	"Basically, we give one recommendation . . . and we try to make this recommendation with a proof, with an evidence that this is right. And this is done in this Phase 4 (of Stage Gate), for example, within the second customer contact phase, which can be a conjoint analysis because then you have facts and data that support your recommendation"
VB1-EL	"The large decision-making is up to the product manager, of course. He will follow the recommendation of the (functional) guy based on the controlled research"
VB4-SM	"We try and get feedback from our testing. So whenever you have tests done and you can quantify the performance of the new product versus the other alternatives that customers have access to (and) then we try and see if we can quantify the benefit that this product will deliver based on all the benefits we think it brings. We will survey as many as many customers as we have access to, or as much test data as we have generated and have access to . . . We ask them to test it, test the hypothesis. Instead of saying every analysis you come up with is wrong and therefore cannot be implemented, you create an implementation plan that allows you to test"
VB2-FA	"We do an analysis of the investment, definitely . . . For something like that, because it would be like a new product and we would be investing, we have a process internally where, before we finalize anything, it goes before the executive team, and we review the pricing. We review our returns on the project"
Unscientific decision-making process	
CB5-EL	"I would love to say it's scientific, but it ain't, I mean, it ain't . . . it's a gut check that's made that"
CB3-EL	"Yeah, it's not a highly scientific, there's not an algorithm I could give you"
COB1-SM	"Now what that premium is, is highly, in my mind, unscientific. That's almost (as much) art as it is science . . . A quantification of the value of the system is the Holy Grail for me"
COB3-EL	"We had information coming in from Japan. We had information coming in from China. So we knew we were in a favorable position, which I think gave us the confidence to go a little bit higher, but I can't say at the end of the day I did a spreadsheet and put in all the factors and came out with a number and said, "That's the number we're going to"
COB2-EL	"As far as having some working formula that enables us to say that this marketplace enables us to mark up 50 percent of what we would normally do, it's probably not as sophisticated as that. It is more a sense of understanding the marketplace and the pricing associated with the applications, and then the value add that we bring to the table to ensure that we achieve maximum pricing"

Notes: VB = Value-based pricing; CB = Cost-based pricing; COB = Competition-based pricing; EL = Executive leader; FA = Finance and Acounting; SM = Sales and marketing

considered the price of the best competitive products and added a premium to it. Although they used cost models (four out of five firms) and margin targets (four out of five firms) to set their minimum prices, the setting of a final price point was reported to be based on ''gut feelings'' and judgment calls (see Table II). When pressed to specify how and by whom the final price point was defined, managers of these firms as well as those in firms using cost-based pricing admitted to relying on ''collective intuition.''

Finding 2: pricing is an orphan in industrial firms that have a cost- or competition-based pricing orientation

No dedicated pricing function existed in the 11 firms in our sample that had a cost- or competition-based pricing orientation. In these firms, pricing activities were highly fragmented, followed informal pricing-review processes, and focused only on margins versus prices (7 out of 11 firms). By contrast, all firms using value-based pricing had dedicated pricing functions (involving 3 to 15 members), tracked specific key performance indicators (KPIs), and led specific weekly or monthly pricing reviews.

Finding 3: the locus of pricing responsibility varies based on pricing orientation

In the 11 firms using cost-based and competition-based pricing, the locus of both tactical and strategic pricing responsibility was situated in the sales function. In all firms using value-based pricing, the pricing function reported to the marketing organization. In these industrial firms, marketing was responsible for strategic pricing, resulting in greater integration of pricing programs in the overall marketing-planning process.

Finding 4: firms using value-based pricing designed formalized processes and established centralized or center-led pricing expertise to support pricing decisions

All firms using value-based pricing created specialized units composed of highly skilled professionals whose mission was to support the product-price-setting process. These units included, as illustrated in Table III, a packaging engineering group, a dedicated pricing team acting as internal consultants, and a specialized market research team dedicated to voice-of-the-customer projects. The role of these units was to provide project-related support to managers who made business-unit-specific pricing decisions.

Table II Evidence of price setting factors in firms using cost-based or competition-based pricing orientation

Pricing method and function	*Interviewee comment*
Product price setting based on gut and feeling	
CB5-EL	''It's based on their gut . . . it's their experience and their gut''
CB3-EL	''Think about the person involved, but mostly, it's got to be a gut – there's no certainty. So there's no analytical (process)''
CB3-FA	''. . . how much do we go in compared to our competition? That's more, you know, a feeling thing . . .''
COB5-EL	''It is not structured at all, and I guess that's one of the things that I find repeatedly through pricing discussions . . . there's so much intuition around it that's used . . . to be very, very honest, at the end of it, it's a gut thing. I said, ''I wanna price it higher. I wanna go with a more premium. We're a premium brand''
CB4-FA	''And it's just gut-feel experience . . . They pretty much took what we had . . . there wasn't a lot of changes – just some small tweaks. Maybe this went up a little bit. Sometimes if you're working so close to it, you don't see the forest through the trees. And then when they look at it, they have a different perspective''
Product price setting based on judgment call and guessing	
CB2-EL	''Judgment call. Judgment call. Not a written down process. It's just a judgment call . . . no scientific mechanism''
COB2-SM	''No. I mean if we know that they're losing – one of their packs may sell for $100, you can find some of that information to get close. Some of it is good guessing. Others are you get limited information''
COB3-EL	''We basically made a somewhat educated guess that we were going to go higher than our typical market price because we were unique in the marketplace''

Notes: VB = Value-based pricing; CB = Cost-based pricing; COB = Competition-based pricing; EL = Executive Leader; FA = Finance and acounting; SM = Sales and marketing

Table III Evidence of role specialization in firms that use value-based pricing	
Pricing method and function	*Interviewee comment*
VB1-EL	''We have dedicated (functional) managers. They don't do anything else, and then just (customer research), and this is observation of the customer. It's videotaping of the customer. It's understanding what is the unarticulated needs of the customer, and of course, also the articulated needs''
VB3-EL	''The way (company) works is we have the business units in (country) which are in charge of development. So they bring the products and then they bring overall pricing guidelines worldwide''
VB3-SM	''You've got the senior manager of pricing, which is responsible for the pricing processes; continuous improvement for (Corporation) overall . . . and then within that group you have a few analysts who help manage the pricing within the system: one technical person, one person who helps on the reporting . . ., one individual who helps out with projects like agreement review process (and) strategic business pricing. And we also have group that focuses in on day-to-day maintenance of making sure price points in the system don't go below a certain threshold''
VB4-EL	''In a development group . . . there's three people like (name) who are development managers. We've got hundreds of development people in the world . . . That's all they do. They don't sell a thing . . . So they're doing the advanced design, advanced development''
VB2-SM	''We have engineering services, our project managers . . . (who) can put together is a cost justification analysis . . . The department is called Engineering Services . . . they'll bring in all the formulas/cost justifications from our customer's end''
VB2-EL	''We have a pricing department. It's four people that are split by market segment, and they're responsible for doing quotes for new business or large – anything that's not under contract should come to them for pricing, to do a quote''

Notes: VB = Value-based pricing; CB = Cost-based pricing; COB = Competition-based pricing; EL = Executive leader; FA = Finance and acounting; SM = Sales and marketing

In these firms, pricing responsibility was center-led, and the department provided pricing support to the entire organization. Our findings (see Table IV) suggest a definition of centralization in which knowledge and capabilities were concentrated to create the concept of a center of excellence for pricing. Five out of six sales and marketing respondents in firms using value-based pricing indicated that this central pricing function acted as a strong resource to improve the managerial decision-making process for setting prices. None of the firms using cost-based pricing (none out of six firms) reported the existence of a centralized pricing function.

Table IV Evidence of expertise centralization in firms that use value-based pricing	
Pricing method and function	*Interviewee comment*
VB1-EL	''. . . we have three full-time equivalents for voice of the customer studies. We have that centrally. So whenever we develop a product for this market, we get them here and they set the whole system because it's a very formal thing''
VB3-SM	''The overall team supports all of the (Company) North America . . . the profit desk underneath the pricing team can look to see whether or not the price points are too low''
VB3-FA	''Pricing is actually at the corporate level here, it's marketing that has that pricing team underneath. So marketing is responsible for defining the price points''
VB4-SM	''I am a corporate function, I go from business to business''
VB4-EL	''When we wanna do something different and new, we hooked up with them (Central Team) (and) when we said, ''You know, on our mature business, we got too many price points. We need to simplify this thing. How do you help us simplify?'' . . . there's this group out there that knows (and) consults on this all the time. Why don't we tap into them, and let's start a project. (That) group is kinda looking for the best of the best in (Company) and in cross-training''
VB4-SM	''We tap into our corporate sales and marketing (team) (and) say, ''Hey, they've got professionals that know the terminology, the theory, and the strategy associated with pricing in general.'' And you do a little bit of negotiation role-playing and that sort of thing. So that's probably once a year or once every year and a half''

Notes: VB = Value-based pricing; CB = Cost-based pricing; COB = Competition-based pricing; EL = Executive leader; FA = Finance and acounting; SM = Sales and marketing

All firms using value-based pricing reported greater formalization of their pricing process as well as other related activities (see Table V), including a formal product-development process. Respondents mentioned using stage gate processes for new product introduction, elaborate voice-of-the-customer management processes, and automated price-deviation processes embedded in the firms' ERP systems. Three out of four of these firms implemented formal pricing-review processes and claimed the need for a strong pricing discipline to make the pricing process more robust.

Finding 5: firms using value-based pricing – but not those using competition-based or cost-based pricing – purposefully diffused pricing capability throughout the firm through training and the designing of proprietary tools

All firms using value-based pricing emphasized the importance of training and designed specific formalized training programs for both existing and newly hired personnel. Only one in six firms using cost-based pricing did so, however, despite recognizing the importance of training (Table VI).

Firms using value-based pricing also focused on strengthening internal capabilities in the areas of market research (four out of four firms), pricing research (three out of four firms), and the development of proprietary tools (four out of four firms) to capture and quantify customer value that were more sophisticated than those described by firms using

Table V Product pricing process formalization by pricing orientation

Pricing method and function	*Interviewee comment*
Formal pricing process	
VB3-EL	''. . . there's a time to money process. From product development to product launch, there's a gate system . . . n Gate 3 or 4 is where the finalized product along with the defined marketing plan of the market organization has to come together. And in that model you'll have seen this customer work that has been done with prototypes and you'll see our pricing models that we'll put together in order to go after our piece of the marketplace''
VB3-SM	''We have the prices structured in the system, the what we call the profit desk underneath the pricing team can look to see whether or not the price points are too low, or are at least profitable and value-based enough to go, regardless of what business or trade it is. It's all set up, up front in the system''
VB3-SM	''We'll have monthly reports that show the trends . . . on a monthly basis, (CEO's Name) along with other individuals get a report to see how has our NSP (Net Sales Price) along with (our) template utilization . . . But it's basically seeing how consistent are we with our pricing to customers''
VB2-EL	''. . . there will be a general price list that will have a high and low on it. And if somebody tries to price outside of that high and low, that will automatically trigger what we call a workflow, which will require an approval from a higher-level marketing manager''
VB1-EL	''this process is not just a nice book. This is standard. That (is) one of the key elements that . . . a cross-functional internal team has come up with. So that's embedded internally (and) deployed internally, and that's (a) very critical success factor . . .''
Informal pricing process	
COB5-EL	''More (of) the formality is around costing and the stage gates are you either proceed or don't proceed based on costing (and) cost targets. We set a cost target based on the margin expectations . . . So we put more formality around costing analysis, and there's less formality around the pricing . . . it's funny how this works''
COB3-EL	''We look at programs we thought we would get and didn't get and do an autopsy on why did we not get them . . . But honestly, once we get a business, we don't review the pricing on a regular basis''
CB2-EL	''It's not reviewed formally. I guess I would call it informal. It's a process, but it's not something we sit down and have a meeting to review all the quotes . . . I'd say that's a little more informal''
CB5-FA	''The pricing was decided among sales and the CEO. There really wasn't a formal meeting that took place with finance related to the pricing. There was no real formal meeting that involved finance at least''
CB4-EL	''I mean I apply those principles and disciplines personally. I don't think we embrace that (pricing) philosophy necessarily formally here''
CB6-EL	''. . . somewhat formalized . . . There wasn't a formal . . . formula that I recall ever having to go to say, ''Okay, if it does this give that a factor of 10 percent. Or this gives a factor of 30 percent.'' Nothing like that. I'm sure that exists, but that was nothing we ever used''

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Table VI Differences in the training focus among firms with different pricing orientations	
Pricing method and function	*Interviewee comment*
Firms that conduct specific pricing training	
VB4-SM	''We do a lot of training on to get ready for a specific price increase because every single one (price increase).is a little bit different. So there is some specific training on this one''
VB4-SM	''Specific (pricing) training for price is probably done in three ways. One way is probably once every year or so, we tap into our corporate sales and marketing . . .'' they've got professionals that know the terminology, the theory, and the strategy associated with pricing in general.'' And you do a little bit of negotiation role-playing. So that's probably once a year or once every year and a half. And then our own team does training about every year and a half on sales basics''
VB4-SM2	''As corporate marketing we've launched a number of initiatives which train people at multiple levels. So you have the everyday practitioners . . . (trained) not just pricing but general aspects of marketing. We are doing training for senior leaders. We are also trying to train people who are running important projects . . . I am very focused on the pricing. I do it as sessions in seminars. I do it on the project kind of work''
VB3-SM	''Every account manager learns how the pricing is done through the BTS which is three weeks of training when an account manager (or) a sales rep starts. And so that's been one of the main ways to train the individuals on how to price, what the value is for selling trade templates''
VB1-EL	''train, train, train, train . . . we are just making a contract with a training company in the US . . . to really teach them value selling, strategic selling and distribution management . . . that's a program for the next 18 month''
Firms that do not conduct specific pricing training	
CB3-SM	''Not a lot. We are very lean on all of our expenses, and so you won't see us spend a lot of money on training. It's expected that I try and convey that to the RVPs, and they convey it to their people. So we just do it by doing it''
CB3-EL	''You know I don't think we're going to do formal training on it''
CB2-SM	''As a company, we used to be really, really good at training. We've lost that over the last six years or so, and . . . we probably don't train 15 percent of what we used to. And that's a little disheartening''
COB4-EL	''. . . training hasn't been as big an impact or driver. We haven't spent as much in training or done as much training as I guess we probably could have''
COB4-SM	''No, we haven't done (training) and honestly that's probably something that you know we should be doing''
COB5-EL	''No, not so much. We haven't (done training), not as formal. Now they have training, certainly, that's specific to their areas, but we've not done pricing training or anything like that''

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cost-based pricing and competition-based pricing. These tools were critical to supporting pricing decisions and to removing the influence of intuition and gut feeling in the final price-setting process. Top executives (four out of four) and sales and marketing respondents (four out of six) in these firms were among the respondents who reinforced the importance of such tools to helping implement the total cost of ownership and value-in-use pricing methodologies.

Discussion

Our data contradict the widely held assumption (Ingenbleek, 2007) that value-based pricing can simply be ''adopted.'' Rather, they strongly suggest that implementation and internalization of value-based pricing requires deep organizational changes that transform the fabric of the firm. We expected to find significant differences in how small and medium industrial firms organized their pricing functions and how pricing decisions were made – and we did. But we also found stark contrasts among firms with different pricing orientations, related to the firms' organizational characteristics.

We begin by discussing the role of intuition and gut feeling in the product price-setting process; then we examine the transformation to value-based pricing from a learning theory perspective.

The role of intuition and gut feeling in the price-setting process for industrial products

While some intuitive influences are generally expected in business and decision-making behaviors, our results suggest that managers in most firms using a cost-based or

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competition-based pricing orientation might be relying heavily on intuitive patterns to reach the optimal price point for their products and services. Many of our informants made product pricing decisions and selected a final price point because ''it felt good,'' ''it felt all right'' or because they had gone around the room and gathered ''collective intuition'' from participants in a price-setting meeting. Other qualified the price-setting process as an exercise in ''Russian roulette'' or as a pure ''gut feel'' decision. In recent years, there has been a resurgence of interest in intuition and gut feeling in decision-making theory, in part due to general dissatisfaction with the concept of rationality and its limitations (Sadler-Smith and Shefy, 2004). Making decisions based on intuition is increasingly viewed as a viable and acceptable approach in today's business context (Burke and Miller, 1999). Intuition may be an appropriate decision-making process in certain situations and business scenarios, especially under uncertainty or turbulence (Khatri and Ng, 2000), novelty, or in situations related to human resources. Scholars relate the intuitive skills of managers to the intuitive skills of chess masters or physicians (Simon, 1987). Miller and Ireland (2005, p. 21) propose a description of the intuitive process based on Roy Rowan's work on the subject:

> Intuition is knowledge gained without rational thought. And since it comes from some stratum of awareness just below the conscious level, it is slippery and elusive, to say the least. New ideas spring from a mind that organizes experiences, facts, relationships to discern a mental path that has not been taken before.

When faced with the need to price a new product or service, managers do not have the luxury of choosing between the rational, analytic approach and the intuitive, emotional approach. They must combine both approaches in order to set prices more effectively (Dane and Pratt, 2007, Simon, 1987). Intuition can then become a complement to an appropriate pricing decision after a thorough analytical and scientific process. This process, conducted by pricing experts, can help decision makers narrow the decision range and remove as much uncertainty and ambiguity as possible from the price-setting process. Firms that adopted value-based pricing have reinforced the scientific and analytical side of the decision-making process and have left little room for error in it.

Value-based pricing: at the nexus of experiential and transformative learning

Implementing and internalizing value-based pricing requires a strong knowledge foundation in pricing in the organization. Prior knowledge confers ''an ability to recognize the value of new information, assimilate it, and apply it to commercial ends'' (Cohen and Levinthal, 1990, p. 130). As previously observed, pricing knowledge and capabilities develop over time (Dutta *et al.*, 2003), accumulate incrementally, and depend on the organizational absorptive capacities (Cohen and Levinthal, 1990; Zahra and George, 2002; Szulanski, 1996) of the pricing-process actors.

Experimentation is an important requirement for the internalization of value-based-pricing concepts, frames of reference, language and forms of interaction. The transformational nature of value-based pricing requires that the organization learn through a process of experiential learning (Kolb *et al.*, 2001, Kolb, 1984) or through trial-and-error experiments (Pfeffer and Sutton, 2006). Experimentation matters because ''it fuels the discovery and creation of knowledge and thereby leads to the development and improvement of products, processes, systems and organizations'' (Thomke, 2003, p. 1). Experiments yield information that comes from understanding what works and what does not work. Learning from past failures can yield rich findings (Thomke, 2003, p. 213). But the most important advantage of learning through experiment is that it provides a valid way for managers to observe and interpret past experiences (Green and Taber, 1978). Consistent with experiential learning theory (Kolb, 1984), the learning process related to value-based pricing requires both assimilation and accommodation learning styles. The organization and its members incrementally assimilate knowledge which will ''stick'' (Szulanski, 1996) to existing pricing knowledge. However, because of the innovative, subjective and sometimes contentious nature of value-based pricing, organizational actors will modify their frames of reference, learning patterns or schemas (Stein, 1995) to accommodate the integration of unexpected and novel knowledge.

Experiential learning alone is not enough to assure the successful transformation to value-based pricing. In combination with transformative learning, it represents a powerful foundation that can help the organization and its members face deep changes and uncertain frames of reference. Transformative learning refers to the process of ''effecting changes in a frame of reference'' or in ''the structures of assumptions through which we understand our experiences'' (Mezirow, 1997, p. 5). Transformative learning relies on the use of prior interpretation to ''construe a new or revised interpretation of the meaning of one's experience in order to guide future action'' (Mezirow, 1996, p. 162, 2000). Our findings suggest that in firms using cost-based pricing or competition-based pricing, frames of reference are very powerful in guiding pricing decisions as they include habits of mind, routines, legacy practices and mentality or mind-sets (Mezirow, 2000) that are deeply engrained in the firm's culture. Transformative learning refers to the process of transformation of these frames or references, routines, norms, and schemas to make them more inclusive, open and ''emotionally capable of change'' (Mezirow, 2000). These changes have implications for both the organization and its individual members. Change requires awareness of how knowledge is created, how information is processed, and what values lead us to perspectives. This process of transformation is equivalent to a reformulation of the structure of meanings (Mezirow, 2000) that requires critical reflection and a possible higher level of mindfulness (Langer, 1997). Mezirow has identified ten phases of transformation (Mezirow and Welton, 1995, p. 50) that encompass factors revealed in our data as critical in the internalization of value-based pricing – experimentation with new roles, acquisition of skills and knowledge, and the building of confidence in new roles and relationships. Mezirow's conception of transformative learning touches on two critical elements of a successful transformation to value-based pricing: the enduring nature of change over time and the irreversibility of the transformation (Taylor, 2007). Both are needed to transform the culture from cost to value and to take the organization to a sustained process of transformation, putting customer value at the center of the firm's reason to exist (Slater, 1997).

Limitations

The findings presented in this paper should be considered in light of several limitations that may affect their generalizability. Our sample of small and medium industrial firms was small (15) and not randomly selected. The sample included firms in only three industrial sectors: building products, transportation products, and plastics and chemicals. A larger sample,

> **"... our results suggest that managers in most firms using a cost-based or competition-based pricing orientation might be relying heavily on intuitive patterns to reach the optimal price point for their products and services."**

and one that includes other sectors such as IT or pharmaceuticals, may yield different findings.

Keywords:
Industrial pricing,
Price setting process,
Pricing orientation,
Pricing decision,
Pricing policy,
Product costs

Although we paid special attention to the potential risks of researcher bias, it is important to mention that the principal researcher has significant experience in and knowledge about industrial pricing – in particular, value-based pricing. However, we made great effort to remain self-reflective about these risks (Corbin and Strauss, 2008) by using open-ended questions to elicit rich, unstructured narratives of respondents' experiences (Maxwell, 2005, p. 22), interpretations, and understanding of pricing events and firm activities.

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