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The adoption of strategic pricing by industrial service firms

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Abstract

Purpose – The purpose of this paper is to measure the extent to which selected contextual variables have an impact on the adoption of strategic pricing by industrial service firms, and determine the effect of the adoption of strategic pricing on company performance.

Design/methodology/approach – Data were collected from 154 industrial service firms operating in four different service sectors through a mail survey. Moreover, qualitative research through 20 in-depth interviews was carried out.

Findings – The study's main findings indicate that market orientation along with a leading position in the market and market growth boost the development of strategic pricing. On the other hand, technological and market turbulence hinder this development, while the overall impact of turbulence is reduced in market-oriented firms. Finally, a positive impact of strategic pricing on company performance was found.

Research limitations/implications – The adoption of strategic pricing requires attention to a variety of factors, while this adoption can improve both qualitative and quantitative aspects of the company's performance. The significance of these findings notwithstanding, the context of the study does limit generalization of its findings to other industrial service sectors and national contexts.

Originality/value – The current study represents one of the first attempts to empirically examine the aforementioned topics in an industrial service context.

Keywords Performance, Services, Business-to-business marketing, Pricing strategy

Paper type Research paper

Introduction

One of the most difficult decisions facing companies providing industrial services is how to price these services in the markets that they operate (Morris and Fuller, 1989). A review of the existing literature on industrial service pricing reveals a number of studies that have focused on issues such as how new industrial services are priced (Indounas and Avlonitis, 2011), the aspects of the pricing process that lead to successful pricing (Indounas, 2009), the relationship between pricing and ethics (Indounas, 2008), the impact of the Internet on price setting within the healthcare industry (Schau *et al.*, 2005), the role of differential pricing, the pricing process in specific contexts such as the construction industry (Akintoye and Skitmore, 1992) or the information technology industry (Grunenwald and Vernon, 1988) and the main factors that influence price decision-making (Morris and Fuller, 1989).

However, there seems to be a lack of relevant empirical studies on the strategic aspects of price decision-making within industrial service firms, despite the fact that a number of different authors have underlined, regardless of the context of operation, the importance of treating pricing decisions from a strategic perspective if effective pricing decisions are to be made. For instance, Sainio and Marjakoski (2009) argue that

price determination is not an operational issue but a strategic-level concept that needs to be connected to business strategy. To justify this argument, they use the concept of revenue logic, which is a concept that gives a holistic perspective on how a firm can finance its various operations. Smith (1995, p. 37) postulates that:

[. . .] a fundamental advantage to adopting a strategic pricing orientation is that pricing decisions are viewed as policy decisions with long-term consequences on strategic performance and competitive advantage.

Similarly, Nagle and Holden (2001) have suggested that a strategic view of pricing facilitates the integration of pricing strategy within the overall marketing and corporate strategy and, thus, the determination of prices that reflect the company's overall objectives. Also, Ross (1984) argues that strategic pricing gives the company the opportunity to adopt a proactive approach when setting its prices and, thus, being able to adapt more effectively to the various market conditions.

Given the lack of empirical studies on the one hand and the importance of strategic pricing on the other, as analyzed above, the current paper tries to contribute to this under-researched area of concern by providing insights regarding the adoption of strategic pricing in an industrial service context. The decision to examine strategic pricing in the specific context was also triggered by the nature of industrial services as described by Morris and Fuller (1989). More specifically, the specific authors define industrial services as that kind of services that tend to be

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non-convenience-type services, are transportable, are usually brought to the customer, involve customer contact in delivery, are not conducive to mass production or mass marketing, involve expensive equipment but also tend to be people-intensive, involve customers with more precise service-level expectations, involve a fairly formal buying process and longer-term, ongoing relationships with service providers and demonstrate demand patterns that are somewhat more stable and predictable. Given the above characteristics, the same authors argue that pricing decisions can hardly go without a detailed planning procedure and an effort to place the emphasis on the long-term consequences of any pricing decision. To this end, it is to be expected that a strategic perspective and orientation toward these decisions will lead to more effective pricing programs and results.

Building from the above arguments, the present research sets out to investigate the adoption of strategic pricing in an industrial service context by intending to:

- measure the extent to which selected contextual variables have an impact on this adoption; and
- determine the effect of this adoption on company performance.

The focus on a number of variables that are expected to have an impact on strategic pricing is in line with a previous study conducted by Tzokas *et al.* (2000). In particular, the specific authors examined the antecedents of strategic pricing in an export industrial product context. Moreover, the focus on these variables is in line with previous research efforts in the area of industrial service pricing where attention has been paid to investigating the antecedents of other pricing concepts such as successful pricing (Indounas, 2009) or new industrial service pricing (Indounas and Avlonitis, 2011). The authors of these studies have suggested that pricing practices should be studied from a situation-specific point of view on the basis of which company- and market-related characteristics that could facilitate the adoption of these practices should be analyzed. Moreover, the need to examine the impact of strategic pricing on company performance is derived from the fact that only normative arguments have been developed within the existing literature regarding the potential benefits that a company could have after adopting the principles of strategic pricing. However, an empirical validation of the impact of strategic pricing on company performance is still lacking.

The remainder of the paper is organized as follows. The concept of strategic pricing is framed and the research hypotheses are developed. Next, the research methodology is presented. Subsequently, the results are reported and, finally, the paper concludes with the implications and limitations of the findings as well as with directions for future enquiry.

Conceptual framework and research hypotheses

The concept of strategic pricing

A number of different authors maintain that industrial service pricing is a highly complicated issue (Akintoye and Skitmore, 1992; Schau *et al.*, 2005). To this end, industrial service firms should move away from simplified cost-based pricing formulas and place their emphasis on adopting a balanced approach when levying their prices by, on the one hand, treating pricing decisions from a market point of view and, on the other hand,

not disregarding financial consideration. This reconciliation among market-related information (e.g. customer reactions to different price levels, competitors' prices and potential actions) and company-related information (e.g. costs, profits, sales), when making pricing decisions, requires treating pricing decisions from a more strategic perspective and examining their long-term consequences rather than treating them as a short-term weapon to gain competitive advantage.

A review of the existing literature reveals the lack of either a theoretical or empirical description of strategic pricing in an industrial service context. Smith's (1995) concept of "managerial pricing orientation" is a useful starting point for defining strategic pricing. The managerial pricing orientation is delineated as:

[. . .] the pattern of policies, activities, and behaviors that business units typically engage in with regard to information gathering and processing; objectives, decision rules and beliefs; organizational decision processes; and organizational responsiveness relating to setting or changing price (p. 29).

Additionally, Nagle and Holden (2001) describe the notion of proactive pricing and set a number of criteria on the basis of which a company can be characterized as a proactive pricer. These criteria relate, among others, to replacing sales goals with profit goals when determining prices, seeking competitive advantage rather than market share, communicating the value that customers attach to a product and taking into account only those costs that relate directly to a specific pricing decision (i.e. incremental unavoidable costs). Strategic orientation of price management seems to relate to a systematic planning process where price decision-making is derived from the overall corporate goals and strategy and is strongly associated with the company's marketing strategy.

Moreover, such an orientation moves away from traditional competitive pricing in that the latter relies on setting the price of a product on the basis of what the competition is charging (Nagle and Holden, 2001). First, competitive pricing is used more often by businesses selling similar products that are not differentiated by the customers' point of view. On the other hand, strategic pricing endeavors to establish a pricing mentality that places its emphasis on determining a final price that reflects the value that customers attach to a product. If this value is considered to be higher than the competing value, then a higher price can be justified. The same authors define value from a cost-benefit analysis perspective in that benefits should exceed costs in customers' mind. Second, the difference between competitive and strategic pricing can be further realized in that case where a competitor reduces its prices. Under the competitive pricing approach, the company has no other option but to lower the price, as temporary sales will be lost. Under the strategic pricing perspective, however, the company should examine the long-term consequences of such a decision along with its overall marketing strategy. In particular, lowering the price may create for customers the impression that product quality is lower or that prices will be decreased even further in the future. Also, continuous reduction in prices may even lead to price wars that could destabilize the whole market. Furthermore, in terms of the marketing strategy, the company might target price-insensitive customers who seek increased quality and customer service and would be indifferent to a price cut. In that case, a lower price would lead to lower profits. Third, competitive pricing

relates to reactive pricing behavior where the company examines carefully competitive behavior and acts accordingly. This fact notwithstanding, strategic pricing, as explained in the previous paragraph, relates to proactive pricing behavior where the company does not only answer to competitive moves but also takes initiatives (e.g. price changes) to set the rules of the game for its own good.

Based on the above arguments and especially those made by Smith (1995), Tzokas *et al.* (2000) provide an empirically derived operationalization for strategic pricing. Its premises rely on:

- placing equal importance to pricing decisions when compared with firm's other decisions (e.g. new product development, advertising);
- monitoring the existing prices regularly;
- determining final prices through a systematic planning process; and
- paying attention to pricing decisions on a continuous basis.

Within this context, pricing is regarded as a task of similar equity to other tasks in the firm, while price determination and reviewing is undertaken through a formalized planning process on a regular basis rather than as a response to *ad hoc* situations.

The above authors studied the concept of strategic pricing in 178 export industrial firms operating in three different sectors in UK, namely, chemical products, metal products and plastic and rubber products. They found that firms practicing a higher degree of strategic export pricing are more often stimulated to export by their positive attitudes to exporting and their more pronounced market orientation. With respect to the focus of the price setting decisions, it is where the considerations of competition and customer are highest that the export price setting is seen to be most strategic. Also, it seems that the formality of the export price setting process assists firms to institutionalize their strategic pricing mode in exports. On the other hand, a strategic approach to exporting is also associated with greater attention to the collection of information on profitability.

Adopting the above definition of strategic pricing, the current research aims to investigate its antecedents along with its effect on company performance in an industrial service context. Figure 1 presents the conceptual framework of the research where strategic pricing is treated as a dependent measure and is related to a set of contextual variables, which may shape the extent to which it is adopted by industrial service firms. The conceptual framework treats also strategic pricing as an independent variable to determine its impact on company performance.

Antecedents of strategic pricing

In regards to the antecedents of strategic pricing, it needs to be clarified that exhaustiveness cannot be claimed, as the conceptual framework does not include all different contextual variables that may assume a role. An effort was made to take into account common variables that have proved to shape firms' corporate strategy in general and pricing strategy in particular. Some of them are company-related in that they can be controlled by the firm (e.g. market orientation), while others cannot be controlled and relate to

the market in which the firm operates (e.g. competitive intensity).

Company-related antecedents

Type of industrial service. According to Boyt and Harvey (1997), industrial services can be divided into two broad categories, namely:

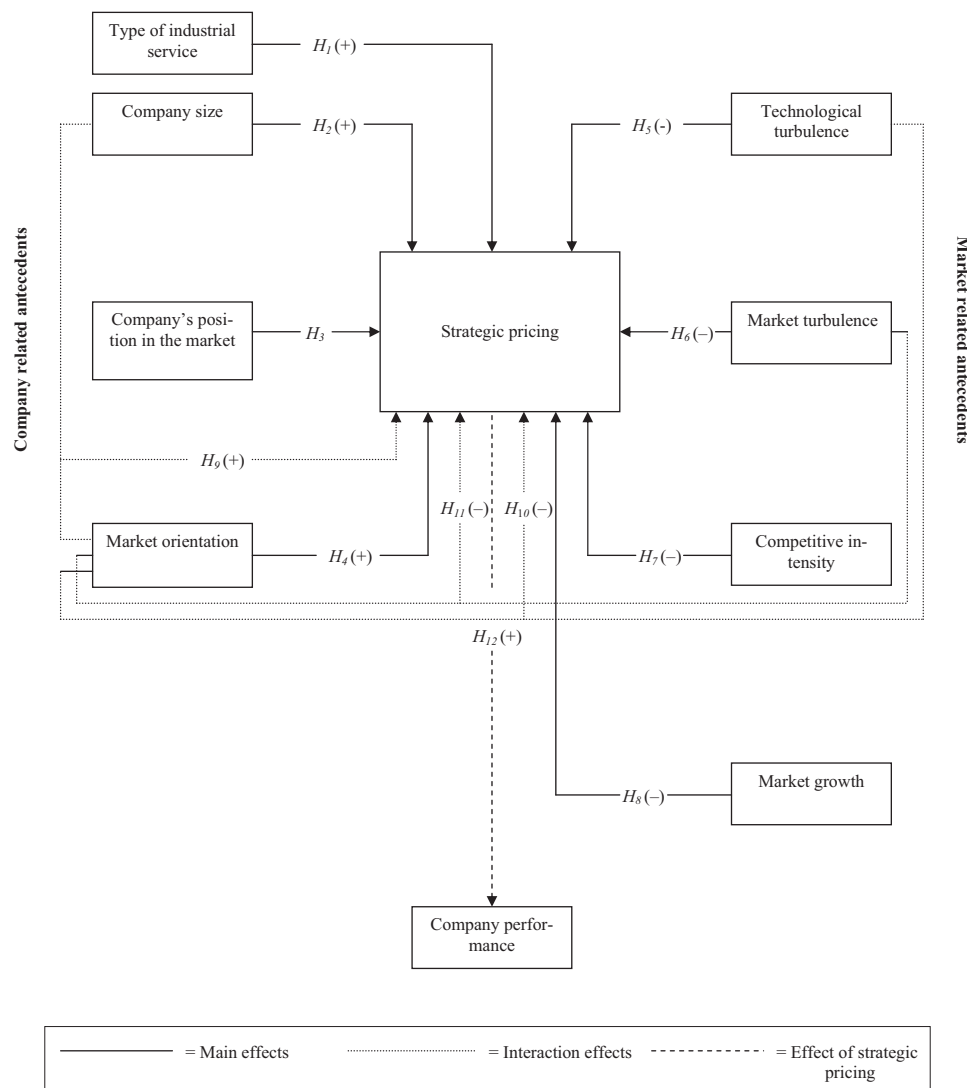
- 1 maintenance and repair services (e.g. equipment repair, janitorial services) that are usually supplied under contract; and
- 2 business advisor services (e.g. legal, consulting) that, in some cases, present new buying situations.

The former are tied to the sale of tangible goods and one could hypothesize that pricing decisions made are more complicated, as features are more readily compared for goods than services. The complexity of pricing decisions may force industrial service firms offering these kinds of services to adopt a more myopic and short-term perspective and orientation toward price decision-making that hinders the adoption of strategic pricing. This premise is based on the suggestions made by authors such as Indounas and Avlonitis (2011) regarding the fact that complexity may prevent industrial service firms from innovative thinking and make them adopt pricing practices (e.g. price below competitors) that seek temporary financial benefits. On the other hand, business advisor services are not tied to a specific good, suggesting that firms offering these kinds of services may not face increased complexity in price decision-making. To this end, these companies are more likely to avoid such short-term-oriented pricing practices and adopt a more long-term perspective to price decision-making that facilitates the adoption of strategic pricing. To this end, it is hypothesized that:

- H1.* The type of industrial service accounts for differences to the level of the adoption of strategic pricing; industrial service firms offering maintenance and repair services that are tied to a good are expected to adopt strategic pricing to a lesser extent than business advisor services that are not tied to a good.

Company size. It is to be expected that, as an industrial service firm size grows larger, prices will be determined on the basis of a more systematic approach. For instance, unlike smaller firms, pricing decisions may be made through a wider cross-functional collaboration and coordination and not be the sole responsibility of the top management. Also, empirical evidence has shown that small companies tend to rely on simplified cost-plus formulas, without examining extensively the conditions of the market in which they operate, and treat pricing from an opportunistic perspective that leads to temporary benefits (Goetz, 1985; Hankinson, 1985). On the other hand, as Avlonitis and Indounas (2005) and Indounas (2009) have suggested, large service companies are expected to rely on a more balanced approach that pays attention to both market- and company-related information, incorporates pricing strategy to the overall marketing and corporate strategy and examines its long-term consequences. Furthermore, as organizations increase in size and tend to become more mechanistic and place more emphasis on prescribed practices (Sutcliffe and McNamara, 2001), it is to be expected that they will monitor their prices more regularly and continuously than

Figure 1 Conceptual framework



smaller firms. Thus, it seems that as an industrial service firm grows larger, it has more potentiality to adopt and apply the principles of strategic pricing. Therefore:

H2. Company size is related positively to the adoption of strategic pricing.

Company's position in the market. The relationship between the company's position in the market and its impact on any aspect of the pricing strategy has not been examined empirically so far. Following the classification put forward by Kotler and Keller (2008), a company can be a leader, challenger, follower or nicher in the market in which it operates. Leaders set the rules of the game and determine the average level of prices in the market, whereas followers imitate leaders' initiatives. Challengers seek to gain market share from leaders, while nichers target a small market segment or offer specialized products. Regarding industrial service markets in particular, authors such as Akintoye and Skitmore (1992) have suggested that the high concentration characterizing some types of these markets may facilitate the leading

company to take price initiatives and leave no other option to its rivals but to follow these initiatives. To this end, the main differences in terms of the adoption of strategic pricing are expected to be found among leaders and the other types of industrial service firms. More specifically, leaders are expected to have a proactive attitude toward pricing and view strategic pricing as a tool that is in line with their overall pricing strategy, while followers are expected to have a reactive approach and not adopt the principles of strategic pricing. Also, while challengers and nichers may also apply these principles, leaders are expected to adopt strategic pricing to a greater extent. Thus:

H3. Company's position in the market accounts for differences in the level of adoption of strategic pricing; leaders are expected to adopt strategic pricing to a greater extent than the other types of companies.

Market orientation. The concept of market orientation refers to a philosophy whereby a firm coordinates the activities of all functional areas toward a better understanding of customer

needs, with the ultimate purpose of creating and sustaining superior customer value (Narver and Slater, 1990). As it has been shown that firms adopting it have a greater potential to perform better than firms not adopting it, market orientation represents a good business practice. On a threefold rationale, a positive relationship between market orientation and strategic pricing in industrial service markets is expected. First, firms adopting market orientation tend to plan and evaluate all managerial activities with a more long-term perspective (Kohli and Jaworski, 1992; Narver and Slater, 1990), which is a necessary ingredient for the adoption of strategic pricing. Second, empirical evidence shows that market-oriented industrial firms tend to view and implement pricing in a significantly more strategic and long-term manner, than non-market-oriented rivals (Tzokas *et al.*, 2000). Third, empirical evidence also shows that a market-oriented approach toward industrial service pricing may lead to more effective pricing decisions (Indounas, 2009). Given the fact that strategic pricing is considered to be a good business practice, the following hypothesis can be formulated:

H4. Market orientation facilitates the adoption of strategic pricing.

Market-related antecedents

Environmental turbulence. The turbulence relating to an industrial service firm's environment is expected to have a negative effect on the adoption of strategic pricing. Following the classification put forward by Moorman and Miner (1997, p. 96), turbulence is divided into *technological turbulence* and *market turbulence*. Technological turbulence refers to "the degree of change associated with new product technologies", while market turbulence:

[...] is the rate of change in the composition of customers and their preferences [...] Both types of turbulence impose difficulties in an organization's survival in the long-run and [...] have a disruptive effect on the ability to plan its activities strategically.

Thus, both technological turbulence and market turbulence are expected to be an impediment to following the principles of strategic pricing. For instance, technological turbulence is likely to reduce firm's familiarity with existing industrial services (in terms of costs, competitive prices or value that customers attach to them), given the fact that these services may be easily surpassed by new ones. This fact is intensified by the technical nature characterizing industrial services (Morris and Fuller, 1989). Being unable to levy prices on the basis of service costs, competitive prices or customer value may easily lead to ineffective price decision-making (Indounas and Avlonitis, 2011). Similarly, market turbulence may lead some industrial service firms to lower prices to gain short-term financial benefits. Moreover, it may lead other firms to exit the market and, while exiting the market, pricing patterns with a short-term perspective may be followed. To this end:

H5. Technological turbulence is related negatively to the adoption of strategic pricing.

H6. Market turbulence is related negatively to the adoption of strategic pricing.

Competitive intensity. Competitive intensity relates to the existence of many competitors who offer undifferentiated services in the market (Diamantopoulos, 1991). Customers'

inability to identify real differences among the alternative competing offerings may lead to frequent price cuts. Price discounting (whether explicit or in the form of rebates, coupons or payment terms) is a common practice in competitive markets with an outmost goal to enhance temporary sales and profits (Argouslidis and Indounas, 2010; Nagle and Holden, 2001). However, such practices may not be a strategic move, as competitors can easily copy them, there is a danger of price wars in the long-run, while even loyal price-insensitive buyers may turn to cheaper alternatives. In other words, intensive competition that characterizes some industrial service markets (Schau *et al.*, 2005) may force industrial service providers to overlook the long-term consequences of their pricing decisions and determine prices from a myopic short-term point of view. Thus, it is to be expected that competitive intensity may hinder the adoption of strategic pricing (i.e. strategic planning of prices, continuous monitoring and reviewing of prices, important attached to pricing decisions). To this end, it is postulated that:

H7. Competitive intensity is related negatively to the adoption of strategic pricing.

Market growth. The growth of a market is expected to have an impact on the decision to adopt strategic pricing or not. For instance, it is to be expected that the principles of strategic pricing are very hard to flourish in stagnant or mature industrial service markets, as the fierce competition that companies face in such markets may leave them no other option than to treat pricing from a tactical point of view. To this end, price promotions and reductions or even price wars are common in such markets (Kotler and Keller, 2008; Nagle and Holden, 2001). On the other hand (Shiple and Jobber, 2001), in growing markets, industrial firms have the ability to avoid competition on the basis of price and place their emphasis on other elements of their marketing strategy (e.g. improved customer service, customization, effective targeting and positioning strategies). Also, empirical evidence shows that industrial firms operating in growing markets have the propensity to adopt novel marketing practices (Avlonitis and Gounaris, 1999). Given the fact that strategic pricing is considered to be a novel marketing practice, pricing decisions have a greater potential to be perceived from a strategic perspective and be made on the basis of a broader integrated and cohesive marketing strategy in growing markets. Therefore:

H8. Market growth boosts the adoption of strategic pricing.

In line with the above main effects, interaction effects among some of the aforementioned variables may be expected. More specifically, a positive effect of both market orientation and company size on the adoption of strategic pricing has been proposed given the fact that, as Avlonitis and Gounaris (1999) have suggested, large industrial firms tend to adopt market orientation to a greater extent than small firms. Moreover, large service firms have the tendency to conduct their pricing activities in a more systematic way than small firms (Indounas, 2009). Thus, a synergy between these two characteristics is

expected to lead to the adoption of strategic pricing. To this end, the following research hypothesis can be formulated:

H9. The larger the firm, the stronger the effect of market orientation on the adoption of strategic pricing.

Also, given the systematic and orderly way of decision making that characterizes market-oriented firms, it might be reasonable to postulate that turbulence in the market may not have such a strong effect in these firms. Thus, the (perhaps permanent) turbulent conditions facing their markets may not alter their way of decision making and lead to price initiatives (e.g. price wars) that are not in line with the principles of strategic pricing. The aforementioned effect may be even smaller in industrial service firms because the ability of customization that characterizes industrial services (Indounas, 2008) may permit these firms to surpass the effect of turbulence in the market through identifying the exact needs of their customers and adapting their offerings to these needs. Therefore, it is postulated:

H10. The stronger the market orientation, the weaker the effect of technological turbulence on the adoption of strategic pricing.

H11. The stronger the market orientation, the weaker the effect of market turbulence on the adoption of strategic pricing.

The impact of strategic pricing on company performance

Strategic pricing is expected to be a “good” business practice that improves price decision-making in the long run. Given the fact that effective price setting has long been recognized as one of the marketing tools that can have a positive impact on marketing performance specifically and company performance in general (Diamantopoulos, 1991; Hinterhuber, 2004; Kotler and Keller, 2008; Myers *et al.*, 2002; Narayandas *et al.*, 2000), it is to be expected that:

H12. The adoption of strategic pricing has a positive impact on company performance.

Research methodology

Selection of industry sectors and population of the study

The study was conducted in Greece. With a view to broadening the generalizability of the findings, a cross-industry population was included (Kohli and Jaworski, 1992), which included four primary sectors, namely, *logistics companies, financial services providers, information technology companies and professional services providers*. The above sectors were chosen on the rationale that they all represent major sectors of the Greek economy in terms of importance to the national economy, capital employed and manpower occupation. Moreover, similar sectors have been chosen in previous studies relating to industrial service pricing (Indounas, 2008, 2009). Based on ICAP Directory (a Gallup’s subsidiary in Greece), which was used as the sampling frame of the research, the total population of the study consisted of 1,196 companies.

Moreover, an emphasis was placed on choosing sectors that will be in line with theoretical classifications of industrial services that have been proposed within the existing literature. More specifically, on the basis of the classification put forward by Boyt and Harvey (1997) and described in the literature review section (*H1*), industrial services can be divided into two broad categories, namely:

- 1 maintenance and repair services that are usually tied to a good; and
- 2 business advisor services that are not tied to a good.

In the case of our research, logistics companies and information technology companies fall in the first category, as they are clearly tied to goods (e.g. transportation or warehousing of raw materials, Internet service provision accompanied by potential repairs in existing infrastructure), while the other types of services fall to the second category, as none of them is tied to a physical good (e.g. investment-related corporate banking services, consulting services).

Field interviews

Twenty personal in-depth interviews were conducted with senior executives, who had the responsibility for setting prices within their firms, from an equal number of firms in the four sectors of our study (five interviews per sector). Managers-interviewees were asked open-ended questions regarding the domain of strategic pricing. Those questions incorporated conceptual insights from the literature, which helped the design of the study’s main questionnaire and the choice of the appropriate contextual variables of the study (Stewart and Cash, 1988).

Questionnaire development and pre-testing

The data collection instrument was a structured questionnaire, designed to be self-administered. Prior to the full-scale data collection, the questionnaire was pre-tested with senior academics specializing in pricing and with the 20 managers who participated in the field interviews to increase its validity (Malhotra and Birks, 2003). These two groups of pilot respondents provided their comments (concerning mainly the sequence of questions) and the instrument was revised accordingly.

Sampling, data collection and response rate

A requested sample of 800 companies was set, and the selection process was based on a proportionate stratified random sample. A requested sub-sample size per sector (stratum), in direct proportion to each stratum’s relative size in the parent population, was determined (Table I). Using a table of digits, a random sample of companies from each stratum was selected (Levy and Lameshow, 1999).

Data were collected by means of a mail survey. Alongside the questionnaire, the survey pack included a formal letter on the university letterhead, explaining the academic purpose of the research and ensuring respondents’ full anonymity and confidentiality (Aaker *et al.*, 2004). It emerged that the determination of prices within smaller companies was very much a top-management decision, whereas at larger companies, the marketing, sales (where a marketing manager did not exist) or financial manager was mainly responsible for setting prices. Consequently, in the smaller companies, the

Table I Total population, requested sample and response rate

Type of companies	Population	Requested sample	No. of companies that responded	Response rate (%)
Logistics companies	563	377	69	18.3
Financial services providers	314	210	37	17.6
Information technology companies	216	144	31	21.5
Professional services providers	103	69	17	24.6
Total	1,196	800	154	19.3

questionnaire was sent to the managing director or an equivalent, while in the larger companies, it was forwarded to the marketing, sales or financial director.

The choice to use this “key informant technique” was compelled by the respondent’s familiarity with the research topic (Dholakia *et al.*, 2004). Similar studies in the broader field of pricing have also used this “key informant” approach without any flaws to the reliability of the data (Avlonitis and Indounas, 2005). To check key informants’ competence, respondents were asked to evaluate their level of knowledgeable about price decision-making in their firm (1 = not very knowledgeable to 7 = very knowledgeable; mean rating = 6.04; SD = 0.68) and their degree of involvement in the pricing process of their firm (1 = minimally involved to 7 = extensively involved; mean rating = 4.48; SD = 0.56). The above mean rating values are a strong indication of key informants’ competence.

Two weeks past the original mailing, a remainder mail was sent to the non-respondents to enhance the response rate. The two mailings yielded 163 questionnaires, 9 of which were not usable, leaving thus an operational data set of 154 returns and an effective response rate of 19.3 per cent, which is in line with other studies in the field of pricing (Hornby and MacLeod, 1996; Tzokas *et al.*, 2000). Table I summarizes the breakdown of responses across the different sectors.

To evaluate possible sources of non-response bias, the extrapolation procedure based on a comparison of the study’s main variables between early (first mailing) and late (second

mailing) respondents was undertaken (Armstrong and Overton, 1977). This comparison found no statistical differences, suggesting that non-response bias was not likely to be a problem.

Measure development

Strategic pricing

To measure strategic pricing, the operationalization put forward by Tzokas *et al.* (2000) was adopted. More specifically, respondents were asked to indicate through a seven-point Likert-type scale (1 = totally disagree, 7 = totally agree) their level of agreement with the four statements presented in the above authors’ original study. An exploratory factor analysis that was conducted (Table II) revealed a one-factor solution (eigenvalue = 2.41). Moreover, the Cronbach’s alpha (α) coefficient (i.e. 0.77) suggests that the internal consistency of the construct is high (Nunnally and Bernstein, 1994).

Also, a confirmatory factor analysis with the maximum likelihood method was used (Sharma, 1996). Table II summarizes the confirmatory factor analysis’ results, which provide support for the construct’s structure and dimensionality. The fit statistics meet or exceed standards of desirable fit. The standardized parameter values indicate that each item loads on the expected domain, in full compliance with the exploratory factor analysis. Evidence of the construct’s convergent validity is provided by the significant t -values for all four items (> 1.96) and by the size of the

Table II Strategic pricing (descriptive statistics, exploratory and confirmatory factor analyses)

Items	Descriptive statistics		Exploratory factor analysis Factor loadings	Confirmatory factor analysis				
	Mean	SD		Unstandardized solution			Standardized solution	
				Parameter	SE	t -value	R^2	Parameter
Pricing decisions are as important as other activities such as promotion, new product development and distribution	3.66	0.77	0.76	0.97	0.09	10.65	0.51	0.71
There is no need to review and monitor periodically our prices because the market does it for us (reverse-coded)	3.15	0.69	0.65	1.01	0.08	12.87	0.62	0.80
Top management treats pricing as a strategic and continuous managerial function	3.39	0.71	0.54	0.96	0.08	13.01	0.63	0.78
We value the consideration of planning of what our prices will be in the future	3.83	0.78	0.48	1.13	0.07	11.98	0.60	0.82

Notes: Mean for overall strategic pricing = 3.51; standard deviation for overall strategic pricing = 0.73; Cronbach α coefficient = 0.77; exploratory factor analysis: eigenvalue = 2.41; Kaiser–Meyer–Olkin measure of sampling adequacy = 0.81; total variance explained = 62.1%; confirmatory factor analysis results: average variance extracted = 0.66; composite reliability = 0.71; goodness of fit statistics: = 61.57; df = 18; = 0.00007; RMSEA = 0.52; NFI = 0.93; NNFI = 0.94; CFI = 0.96; IFI = 0.95; GFI = 0.91; AGFI = 0.85

coefficients of average variance extracted, which exceeds the suggested minimum of 0.50 (Fornell and Larcker, 1981). Also, the value of composite reliability exceeds the recommended minimum of 0.60, providing, thus, evidence of the construct's internal consistency (Bagozzi *et al.*, 1991).

Antecedents of strategic pricing

Type of industrial service was measured through a nominal scale where respondents indicated in which one of the four types of industrial services investigated in the current study (i.e. logistics, information technology, financial and professional) their company falls in.

Company size was measured by both the number of full-time employees and net assets (in Euros). The two indicators were highly correlated ($r = 0.86$), and therefore, for reasons of practical implementation, the indicator of full-time employees was adopted. This practice has been also used in previous studies (Argouslidis and Baltas, 2007).

Company's position in the market was determined through a categorical question. Given a short description of the four categories put forward by Kotler and Keller (2008), respondents were asked to indicate the one that best described their company's position in the market. A dummy variable was then created for the four categories, namely, leaders ($n = 21$), challengers ($n = 56$), followers ($n = 51$) and nichers ($n = 26$).

For *market orientation*, the 15-item operationalization of Narver and Slater (1990) was adopted. The construct captures market orientation through three behavioral components, namely, customer orientation, competitor orientation and interfunctional coordination. Items were anchored on a seven-point rating scale (1 = not at all to 7 = to a great extent). Greater ratings denote a higher market orientation. The coefficient alpha value for construct was 0.85 (mean value = 4.02, standard deviation = 0.73).

For *technological turbulence* and *market turbulence*, the five-item constructs proposed by Jaworski and Kohli (1993) were adopted. For *competitive intensity*, the four-item operationalization put forward by Kohli and Jaworski (1992) was used. Likert-type rating scales (1 = totally disagree to 7 = totally agree) were used for these three constructs. The coefficient alpha values for the three constructs were 0.71, 0.73 and 0.84, respectively; their mean values were 3.56, 3.75 and 4.03, respectively; and their standard deviation values were 0.67, 0.71 and 0.82, respectively.

Market growth was measured through a 1-7-point rating scale (1 = rapidly declining to 7 = rapidly growing) that was originally developed by Avlonitis and Gounaris (1999). Respondents were asked to indicate how their market evolved over the past five years and what their forecast is for the next five years. The construct exhibited good measurement properties (one-factor solution, eigenvalue = 3.01, total variance explained = 68.1 per cent, alpha coefficient = 0.79, mean value = 3.52, standard deviation = 0.82).

Table III The impact of the type of service on the adoption of strategic pricing: analysis of variance

Strategic pricing construct	Logistics companies	Financial services providers	Information technology companies	Professional services providers	F	Sig.
Strategic pricing	3.71	3.68	3.75	3.89	1.51	NS

Company performance

To measure company performance, a number of self-reported subjective performance measures, which have been used successfully in previous empirical studies (Jaworski and Kohli, 1993, Gray and Matheson, 1996, Han *et al.*, 1998), were used. Respondents were asked to evaluate 11 different performance measures (e.g. profitability, brand awareness, customer loyalty, corporate reputation) compared to their nearest competitor over the past three years through a 1-7-point rating scale (1 = very poor to 7 = excellent).

In considering the use of objective measures, it was felt that some of the respondents, for reasons of confidentiality, might be unwilling to provide actual figures of their performance. Also, the practice of using subjective measures of performance is not a new approach and has been successfully used in previous empirical studies that seek to investigate potential relationships between company performance and various aspects of management (Verhage and Waarts, 1988). Moreover, studies that have used both objective and subjective measures of performance have found strong correlation among them (Venkatraman and Ramanujam, 1986), warranting, thus, the validity of subjective measures.

The items of all scales used in the present study are summarized in Table AI.

Results

Antecedents of strategic pricing

To test $H1$, an analysis of variance was run. This analysis revealed that the type of service does not seem to have an impact on the adoption of strategic pricing. The mean values indicate that strategic pricing is adopted by the companies in our sample regardless of their sector of operation (Table III).

The same result emerged when the two types of companies on the basis of the classification put forward by Boyt and Harvey (1997) were examined. More specifically, logistics companies and information technology companies were merged to form maintenance-repair services that are offered under a contract and are tied to a good, while financial services and professional services providers were merged to form the business advisor services that are not tied to a good. A t -test analysis that was run did not reveal statistical differences regarding the adoption of strategic pricing (Table IV). To this end, $H1$ is rejected.

Table IV The impact of the type of service on the adoption of strategic pricing: T-test analysis

Strategic pricing construct	Maintenance repair services	Business advisor services	t-value	Sig.
Strategic pricing	3.80	3.73	1.46	NS

To test *H2-H11*, a multiple regression analysis estimated by the least squares method was used. This econometric method is particularly suited for the empirical validation of hypothesized structural relationships and theory development (Malhotra and Birks, 2003). The regression equation has the following form:

$$\begin{aligned} \text{Strategic pricing} = & \alpha + \beta_1 (\text{COMPANY SIZE}) \\ & + \beta_2 (\text{LEADER}) + \beta_3 (\text{CHALLENGER}) \\ & + \beta_4 (\text{FOLLOWER}) + \beta_5 (\text{NICHER}) \\ & + \beta_6 (\text{MARKET ORIENTATION}) \\ & + \beta_7 (\text{TECHNOLOGICAL TURBULENCE}) \\ & + \beta_8 (\text{MARKET TURBULENCE}) \\ & + \beta_9 (\text{COMPETITIVE INTENSITY}) \\ & + \beta_{10} (\text{MARKET GROWTH}) \\ & + \beta_{11} (\text{SIZE} \times \text{MARKET ORIENTATION}) \\ & + \beta_{12} (\text{MARKET ORIENTATION} \\ & \times \text{TECHNOLOGICAL TURBULENCE}) \\ & + \beta_{13} (\text{MARKET ORIENTATION} \\ & \times \text{MARKET TURBULENCE}) + \varepsilon \end{aligned}$$

where, α = standard regression intercept; $\beta_1 - \beta_{13}$ = parameters of the predictor (independent) variables; and ε = error term.

To reduce the effect of multicollinearity, the variables were mean-centered before constructing their interactions (Aiken and West, 1991). Furthermore, to test potential multicollinearity among the independent variables, correlation analyses were run. The low-to-moderate correlations identified (Table V) suggest that multicollinearity does not seem to be a problem. Also, the reciprocals to the variance inflation factors for the independent variables were identified. All of them were much higher than the suggested threshold of 0.10, which indicates multicollinearity among the variables (Field, 2000).

We now turn to examine the parameters of the independent variables. Upon closer examination of Table VI, it emerges that the model is significant at the $p < 0.01$ level. Also, contrary to *H2*, *H7*, *H9* and *H10*, *H3*, *H4*, *H5*, *H6*, *H8* and *H11* are supported. More specifically, with reference to main effects, while being a challenger, follower or nicher does not exert any influence on the adoption of strategic pricing, leaders tend to place their emphasis on this adoption (*H3*).

Furthermore, market orientation and market growth have a positive impact on strategic pricing (*H4* and *H8*, respectively), while technological turbulence and market turbulence have a negative influence (*H5* and *H6*, respectively). On the other hand, company size and competitive intensity were not found to have any impact on strategic pricing (*H2* and *H7*, respectively). Regarding interaction effects, it emerges that the stronger the market orientation, the weaker the effect of market turbulence on the adoption of strategic pricing (*H11*).

The impact of strategic pricing on company performance

To test the impact of strategic pricing on company performance (*H12*), regression analyses with each one of the dimensions of company performance were run where strategic pricing was treated as the independent variable and each one of these dimensions as the dependent variable (Table VII).

The results indicate that strategic pricing has a positive impact on company performance in both quantitative (i.e. profitability, total revenue, cost-effectiveness) and qualitative (i.e. brand awareness, corporate reputation, degree of differentiation) terms. To this end, *H12* is accepted.

Discussion and implications

As the findings of the study suggest, strategic pricing adoption can be accomplished through paying attention to a combination of factors relating to the company's internal and external environment. This finding is in line with the suggestions put forward by previous authors in the field of industrial service pricing, underlying the importance of paying attention to both company- and market-related issues if effective pricing decisions are to be made (Indounas, 2009; Morris and Fuller, 1989).

Regarding the internal environment, in line with what was intuitively expected, market orientation was found to boost the development of a strategic pricing culture. The principals of market orientation can provide support for this finding: adopting a strategic-based pricing approach requires a long-term perspective and market-oriented firms learn to treat all managerial activities and decisions in a long-term and market-focused manner (Narver and Slater, 1990). This finding is in line with the study by Tzokas *et al.* (2000)

Table V Correlations among the independent variables of the regression model

Independent variables	Company size	Leader	Challenger	Follower	Nicher	Market orientation	Technological turbulence	Market turbulence	Competitive intensity	Market growth
Company size	1									
Leader	0.41	1								
Challenger	0.32	0.38	1							
Follower	0.23	0.31	0.39	1						
Nicher	0.41	0.29	0.23	0.31	1					
Market orientation	0.22	0.42	0.28	0.29	0.36	1				
Technological turbulence	0.42	0.28	0.32	0.22	0.33	0.27	1			
Market turbulence	0.39	0.33	0.34	0.21	0.31	0.25	0.31	1		
Competitive intensity	0.32	0.32	0.42	0.32	0.29	0.34	0.38	0.29	1	
Market growth	0.23	0.44	0.32	0.31	0.30	0.41	0.32	0.27	0.31	1

Table VI Antecedents of strategic pricing: regression analysis

Hypothesis no.	Proposed effect	Independent variables	Standardized beta	Standard error	Proposed effect vs results
Main effects					
H1	(+)	Company size	0.12	0.09	Not supported
H2		Leader	0.27 ^b	0.07	Supported
H2		Challenger	0.10	0.08	
H2		Follower	0.14	0.11	
H2		Nicher	0.16	0.13	
H3	(+)	Market orientation	0.30 ^a	0.10	Supported
H4	(-)	Technological turbulence	-0.26 ^b	0.13	Supported
H5	(-)	Market turbulence	-0.33 ^a	0.06	Supported
H6	(-)	Competitive intensity	-0.12	0.08	Not supported
H7	(+)	Market growth	0.34 ^a	0.14	Supported
Interaction effects					
H8	(+)	Company size × Market orientation	0.07	0.06	Not supported
H9	(-)	Market orientation × Technological turbulence	0.09	0.07	Not supported
H10	(-)	Market orientation × Market turbulence	-0.23 ^b	0.09	Supported

Notes: Model summary: $R^2 = 0.31$; adjusted $R^2 = 0.27$; $F = 8.01$; ^a $p < 0.01$, ^b $p < 0.05$

Table VII The impact of strategic pricing on company performance

Items	Standardized beta	SE	Model summary	Adjusted R^2	F	Sig.
Profitability	0.54	0.11	0.40	0.35	9.24	$p < 0.01$
Total revenue	0.38	0.10	0.35	0.30	8.99	$p < 0.05$
Customer loyalty	0.12	0.08	0.19	0.16	7.01	NS
Brand equity	0.08	0.07	0.07	0.05	5.43	NS
Brand awareness	0.51	0.13	0.37	0.33	9.09	$p < 0.01$
Corporate reputation	0.35	0.11	0.33	0.30	9.01	$p < 0.05$
Customer satisfaction	0.23	0.10	0.23	0.18	7.45	NS
Changes in profitability	0.19	0.11	0.21	0.17	7.42	NS
Success of new service introductions	0.05	0.08	0.06	0.04	5.12	NS
Cost-effectiveness	0.41	0.12	0.35	0.31	9.06	$p < 0.05$
Degree of differentiation	0.48	0.13	0.36	0.32	9.07	$p < 0.05$

Note: Bold values indicate those items where statistical significance has been found

conducted in the field of industrial export pricing where the development of a market-oriented culture within the industrial firm was found to facilitate the adoption of strategic pricing. Moreover, this finding is in line with a previous study in the field of industrial service pricing in particular where successful pricing relates to market-oriented behavior in terms of pricing objectives formulated and pricing methods and policies used (Indounas, 2009).

Also, the company's position in the market influences the development of strategic pricing culture. In particular, contrary to challengers, followers and nichers, leaders were found to have a positive attitude toward the principles of strategic pricing. Leaders must maintain a constant watch so as not to permit other companies to challenge their strengths or take advantage of their weaknesses. To this end, they are expected to adopt new managerial practices such as strategic pricing in order not to miss a turn in the market and plunge into second or third place. This finding may be also explained by the concentrated nature of some industrial service markets, as authors such as Akintoye and Skitmore (1992) have pointed out. This concentration may facilitate the leading company to take price initiatives and leave no other option to its rivals but

to follow these initiatives. Moreover, on the basis of the qualitative research that was conducted in the initial phase of the research, it is interesting to mention that managers from all sectors that were studied (i.e. logistics companies, financial services providers, information technology companies and professional services providers) validated the concentrated nature of their market that makes leaders to adopt strategic pricing to a greater extent than the other types of companies. As the marketing manager of a financial services provider suggested:

[...] our company has a small market share and in most of the cases has no other option but to follow what bigger companies in our market are doing [...] Strategic pricing seems to be a practice that cannot be easily implemented in our company.

On the other hand, the CEO of a leading logistics company argued that:

[...] we place our emphasis on those elements of our pricing strategy that seem to reflect a strategic behavior. After all, a strategic orientation to all our activities (not only pricing) is one of the reasons that we are the number one business in our market.

Nevertheless, initiating the strategic pricing process does not appear to be entirely at the company's discretion.

Market-related characteristics have also an influence on the development of strategic pricing orientation. More specifically, market growth was found to be another facilitator of strategic pricing. This finding confirms previous research in the field of industrial markets that industrial firms operating in growing markets have the tendency to adopt novel marketing practices (Avlonitis and Gounaris, 1999). Strategic pricing is such a novel practice. Growing industrial service markets are characterized, among else, by high demand, high profit margins, increased number of existing competitors and low barriers for new competitors to enter the market. These markets leave room for innovation and, contrary to mature or declining markets, give the opportunity to compete on a non-price basis (e.g. improved customer service, customization, effective targeting and positioning strategies) to survive in the long run. To this end, pricing decisions have a greater potentiality to be perceived from a long-term perspective and be formulated on the basis of the principles of strategic pricing. The opinion expressed by the finance manager of a professional service provider regarding the impact of market growth is characteristic:

Our company operates in various markets with different levels of growth. When it comes to a growing market, it is easier for us to adopt a strategic perspective towards pricing decisions. On the other hand, a mature or even worse declining market may force us to rapidly decrease prices in order to have temporary benefits.

Turbulence (i.e. market and technological) was found to be an impediment in strategic pricing adoption. This finding confirms partially the positive role of market growth, as exemplified above, as turbulence relates mainly to stagnant and mature industrial service markets. Turbulent markets are characterized by difficulty in predicting their future structure in terms, for instance, of technological advances or new products requirements. Also, it is difficult to foresee current competitors' potential strategies and actions or the entrance of new competitors in the market (Moorman and Miner, 1997). In such conditions of environmental uncertainty, there seems to be a downward pressure on prices, which may lead many firms to design and implement myopic pricing practices (e.g. price discounts) to gain short-term financial benefits. However, these practices lack strategic long-term perspective and orientation, imposing, thus, barriers in formulating and implementing pricing strategy from a strategic point of view. Despite the lack of previous research regarding the impact of turbulence in the field of industrial service pricing, this finding may be also explained by the technical nature of industrial services, as analyzed by Morris and Fuller (1989). More specifically, the rather technical nature of industrial services such as information technology ones may lead an industrial service firm to adapt continuously to new technological advances, which may be an impediment to cultivating a strategic pricing orientation. As the marketing manager of a logistics company suggested on the basis of the qualitative research conducted:

[. . .] technological and market turbulence in some of our markets that we operate creates difficulties in adopting a strategic attitude to pricing because we cannot easily come up with the rapid changes that take place.

However, the effect of market turbulence is reduced in market-oriented firms. This finding is in line with previous empirical studies in the field of industrial markets, which have shown that “market orientation is associated with the firms’

need to sustain their growth and prosperity within a broader framework of changing market conditions” (Avlonitis and Gounaris, 1999, p. 1,030). This finding is also in line with the study conducted by Indounas (2009), which has indicated that a market-oriented approach toward the pricing process of industrial service firms may lead to more successful pricing decisions. Thus, even in turbulent markets, understanding and applying the principles of market orientation seems to be a good business practice, which leads to effective marketing strategies, part of which might be a strategic approach toward pricing decisions.

On the other hand, the interaction of technological turbulence and market orientation does not have any impact on following the principles of strategic pricing. In other words, the need to adapt to new technological advances that this kind of turbulence imposes to any industrial service firm may be so strong that it, even though this firm might be market-oriented, hinders the adoption of good business practices such as strategic pricing. This finding may be again partially explained by the technical nature of industrial services (Morris and Fuller, 1989) that makes technological turbulence an issue of paramount importance for the providers of these services.

Also, competitive intensity was not found to exert any influence on the adoption of strategic pricing. This finding is in contrast with the suggestions made by previous authors regarding the significant role of competitors in industrial service pricing (Akintoye and Skitmore, 1992; Indounas, 2008, 2009). However, it could be explained by the customized nature of industrial services (Grunenwald and Vernon, 1988). More specifically, the fact that industrial services can be tailor-made to the individual needs of specific customers may suggest that it may not be so easy for competitors to copy such a service and, thus, the role of competitive intensity may be reduced. The types of services examined in our study have also this characteristic and as the CEO of a professional service provider pointed out:

[. . .] although there are competitors in our market, the type of the service that we offer to our customers is so unique that cannot be easily copied [. . .] We actually sell advice and expertise. How can you copy that? Competitive intensity is not a big issue for us.

It is also interesting that company size was not found to have an impact on the adoption of strategic pricing, while its interaction with market orientation did not again lead to any kind of influence on this adoption. Given the fact that strategic pricing can be considered as a systematic way of price decision-making, this finding is in contrast with the suggestions made by authors such as Avlonitis and Indounas (2005) that large service firms have the tendency to conduct their pricing activities in a more systematic way than small firms. However, this finding reflects that an industrial service firm may follow the principles of strategic pricing regardless of its size. It is characteristic that, during the qualitative phase of the research, interviewees belonging to both small and large industrial service firms indicated the importance and the benefits that their companies could realize through the adoption of strategic pricing.

In line with the above argument, the type of industrial service was not found to exert any influence on the adoption of strategic pricing. The companies in our sample seem to follow the principles of strategic pricing regardless of their sector of

operation. The same result emerged when the differences between these companies regarding this adoption were examined on the basis of whether these companies are maintenance–repair ones or business advisor ones. This finding contrasts the suggestions put forward by authors such as [Boyt and Harvey \(1997\)](#) regarding the fact that the different characteristics of these two types of industrial services necessitate different marketing strategies that may also reflect on their pricing strategy. However, as in the case of company size, this finding indicates that an industrial service firm could profit from the adoption of the principles of strategic pricing irrespective of the sector in which it operates.

The impact of strategic pricing on company performance

What clearly emerges from this study is that various aspects of company performance can be improved through adopting the practice of strategic pricing. This finding is in line with the suggestions made by authors such as [Sainio and Marjakoski \(2009\)](#). These authors focus on the concept of revenue logic in order to stress the importance of determining industrial service prices from a strategic point of view. This finding can be also explained by the numerous advantages that this practice can offer to any industrial service firm. More specifically, strategic pricing gives the firm the opportunity to develop a coherent set of pricing policies and procedures that are in line with both the marketing goals and strategy and the overall corporate objectives and strategies. Also, strategic pricing implementation involves finding a balance between the industrial service firm's different departments and functions (e.g. marketing, finance), as it places its emphasis on both company-related (e.g. costs) and market-related (e.g. customers, competitors) factors that may affect pricing strategy formulation. Moreover, this practice moves away company thinking from a short-term myopic point of view and endeavors to monitor the long-term consequences of pricing decisions. In a sense, strategic pricing helps the firm to understand the factors that make some pricing strategies succeed and others fail and also determine the overall environment in which these strategies should be designed ([Tzokas et al., 2000](#)). To this end and despite the fact that strategic pricing adoption can hardly go in reality without a change in existing attitudes and beliefs ([Nagle and Holden, 2001](#)), it seems that this adoption may contribute to the industrial service firm's success in the market.

Building from the above arguments, the present paper tried to contribute to an under-researched area of industrial service pricing, namely, strategic pricing. What could be considered to be new on the basis of the above findings relates to the fact that they provide insights regarding the factors that boost the adoption of strategic pricing that can further help to build the profile of strategic pricers in industrial service markets, and the specific performance dimensions that this firm could improve through this adoption.

Managerial implications

From a managerial point of view, managers within industrial service firms wishing to imbue a strategic orientation to their pricing decisions may find value in appreciating that their efforts should be directed at different levels. First, it seems that

benefits will be gained if they strive to cultivate an approach toward pricing strategy that incorporates the principles of market orientation. These principles would enable industrial service firms to treat pricing as an issue requiring attention to the broader environment in which they operate. The importance of market orientation is also reflected in the fact that it may reduce the effect of turbulence in the market and help the company to apply strategic pricing even in turbulent environments.

Second, it seems that the adoption of strategic pricing is unrelated to company size and sector of operation. To this end, not only large industrial service firms but also medium and small ones might have to gain a lot by endeavoring to determine their prices on the basis of a strategic perspective. In other words, irrespective of its size, any industrial service firm can still apply the notion of strategic pricing. Similarly, regardless of the sector of operation, managers responsible for setting prices within their industrial service firms could follow the principles of this practice.

Third, as the current study revealed, contrary to challengers, followers and nichers, leaders are those types of industrial service firms that have the greatest possibility to adopt strategic pricing. Leaders try to protect their position in their market through building the appropriate marketing and corporate strategies. To this end, the specific actions that relate to the practical application of strategic pricing may help managers responsible for setting prices within these firms to maintain their competitive edge in the market.

Fourth, there seems to be difficulty in applying the practice of strategic pricing in turbulent environments. Such environments may lead to short-term myopic pricing practices that are in contrast with the basic principles of strategic pricing. On the other hand, growing markets seem to facilitate the practice in question. Thus, especially for industrial service firms that are applying this practice for the first time, the best option might be to choose more stable and balanced markets with a growth potential.

Fifth, the adoption of strategic pricing seems to improve an industrial service firm's various performance dimensions. In particular, apart from cost-effectiveness, profitability and revenue-related issues, the benefits of this adoption can be also realized in terms of improved customer loyalty, degree of differentiation, brand awareness and corporate reputation. In other words, applying the principles of strategic can offer numerous advantages to industrial service firms and help them perform better in both quantitative and qualitative terms.

Limitations and future research directions

The present study suffers from some limitations. First, it has been conservative in the selection of contextual variables that may have an effect on the adoption of strategic pricing (e.g. market orientation, market and technological turbulence, market growth). Future studies could further test the impact of constructs like the formality of price decision-making as exogenous constructs. Also, research on industrial services has indicated that manufacturing companies have to a variable degree managed to turn services into billable products. To this end, the degree of servitization of the company could be an antecedent of the adoption of strategic pricing. The consideration of additional contextual variables could increase

the explanatory power of the model and provide additional insights.

Also, the data that were collected to test the hypothesized model have multiple scaled items for each construct. As such, structural equation modeling could be another appropriate mean to test the proposed hypotheses that would account for item measurement error.

Moreover, because the study's data pertain to one single country, the findings may not be generalizable to firms operating in different national or cultural contexts. Therefore, there are prominent replication attributes in industrial service settings of other countries, and it may be worthwhile to test the generality of these findings through future studies.

Also, contrary to previous studies that attempted to study the main effects of contextual variables on strategic pricing, the present study tried to test some reasonable interactions. Two of the three proposed interactions were not found to be statistically significant and may deserve future research considerations.

Furthermore, given the importance of strategic pricing if effective pricing are to be made, it might be useful to study strategic pricing in a number of other industrial service settings too. Future research could indicate the extent to which the ideas presented in this paper can be applied regardless of context.

Additionally, on the basis of the qualitative research that was conducted in the initial phase of the study, it emerged that an interesting avenue for future study would be to compare industrial service firms with industrial firms offering physical products regarding the antecedents and consequences of the adoption of strategic pricing. This kind of research may reveal unique antecedents and performance dimensions for both service and product firms.

Similarly, the interviews that were conducted on the basis of the qualitative research indicated that, in line with the above argument, future research could focus on the difference between industrial and consumer settings regarding the adoption of strategic pricing. The differences between these two settings might again reveal unique antecedents and consequences for each setting.

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About the author

Kostis Indounas received his PhD in marketing from the Athens University of Economics and Business, Athens. He is currently an Assistant Professor in marketing at the same University. His works have appeared in international conferences and academic journals such as *Industrial Marketing Management*, *Journal of Service Management*, *Journal of Business and Industrial Marketing*, *Business Horizons*, *Journal of Retailing and Consumer Services*, *European Journal of Marketing* and *Journal of Services Marketing*, among others. His teaching and research interests are in the areas of pricing, services marketing, marketing for non-profit organizations and new product development. Kostis Indounas can be contacted at: indounas@aub.gr

Appendix

Table AI Construct operationalization

Construct	Items
Strategic pricing ^a	<ol style="list-style-type: none"> 1. Pricing decisions are as important as other activities such as promotion, new product development and distribution 2. There is no need to review and monitor periodically our prices because the market does it for us 3. Top management treats pricing as a strategic and continuous managerial function 4. We value the consideration of planning of what our prices will be in the future
Company size	Number of full-time employees
Company's position in the market	Categorical question (leader, challenger, follower, nicher)
Market orientation ^b	<ol style="list-style-type: none"> 1. Our business objectives are driven primarily by customer satisfaction 2. We constantly monitor our level of commitment and orientation to serving customers' needs 3. Our strategy for competitive advantage is based on our understanding of customers' needs 4. Our business strategies are driven by our beliefs about how we can create value to customers 5. We measure customer satisfaction systematically and frequently 6. Our sales people regularly share information within our company concerning competitors' strategies 7. We rapidly respond to competitive actions that threaten us 8. Top management regularly discuss competitors' strengths and strategies 9. We target customers when we have an opportunity for competitive advantage 10. Our top managers from every function regularly visit our current and prospective customers 11. We freely communicate information about our successful and unsuccessful customer experiences across all business functions 12. All of our business functions are integrated in serving the needs of our target markets 13. All of our managers understand how everyone in the business can contribute to creating customer value 14. We give close attention to after-sales service 15. All of our business functions and departments are responsive to each other's needs and requests
Market turbulence ^a	<ol style="list-style-type: none"> 1. In our industry, customers' product preferences change quite a bit over time 2. Our customers tend to look for new products all the time 3. We are witnessing demand for our products and services from customers who never bought them before 4. New customers tend to have product-related needs that are different from those of our existing customers 5. We cater to match the same customers that we used to in the past (–)
Technological turbulence ^a	<ol style="list-style-type: none"> 1. The technology in our industry is changing rapidly 2. Technological changes provide big opportunities in our industry 3. It is very difficult to forecast where the technology in our industry will be in the next five years 4. A large number of new product ideas in our industry have been made possible through technological breakthroughs 5. Technological developments in our industry are rather minor (–)
Competitive intensity ^a	<ol style="list-style-type: none"> 1. Competition in our market is extremely intensive 2. It is quite usual to have price wars in our market 3. Competitors are weaker in comparison with us (–) 4. Every day we learn of a new action taken by our competitors
Market's growth rate ^c	<ol style="list-style-type: none"> 5. Market's evolution over the last years 6. Forecast about the market's evolution within the next five years
Company performance ^d	<ol style="list-style-type: none"> 1. Profitability (compared to nearest competitor) 2. Total revenue (compared to nearest competitor) 3. Customer loyalty (compared to nearest competitor) 4. Brand equity (compared to nearest competitor) 5. Brand awareness (compared to nearest competitor) 6. Corporate reputation (compared to nearest competitor) 7. Customer satisfaction (compared to nearest competitor) 8. Changes in profitability (compared to nearest competitor) 9. Success of new service introductions (compared to nearest competitor) 10. Cost-effectiveness (compared to nearest competitor) 11. Degree of differentiation (compared to nearest competitor)

Notes: (–): item reverse-coded; ^aLikert-type scale (1 = totally disagree to 7 = totally agree), ^bseven-point rating scale (1 = not at all to 7 = to a great extent), ^cseven-point rating scale (1 = rapidly declining to 7 = rapidly growing), ^dseven-point rating scale (1 = very poor to 7 = excellent)