The confidence factor in pricing: driving firm performance

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Introduction

Pricing is a key performance driver. Implementing pricing effectively, however, is difficult. Contrast the experiences of companies such as Netflix and JC Penney with those of Clariant, GE, Apple or Amazon: The former two companies have hastily implemented changes to their pricing programs with so far highly disappointing results: customers left in anger leading to sharp reductions in profits and stock prices at both companies (Mohammed, 2012; Cawley and Freeland, 2013). The Swiss specialty chemical company Clariant provides a contrasting example: The company's operating profitability was negative in 2002 (−2,2 percent of sales) and reached industry-leading levels of 10 percent in 2010, largely as a result of the emphasis of the CEO, Jan Secher, on pricing as key profit driver. Jan Secher deemphasized the company's traditional focus on volume and stressed the need to ''increase prices based on our added value'' (Secher, 2006). Similarly, at General Electric, Jeff Immelt, the CEO is personally championing the importance of effective pricing programs: ''In a deflationary world, you could get margin by working productivity; now, you need marketing to get a price'' (Stewart, 2006). Apple relentlessly increases customer value and price, while Amazon is practicing the opposite: At the launch of Amazon's tablet computer, in a thinly veiled criticism of Apple, the front page of Amazon reads as follows:

> Dear Customer. There are two types of companies: those that work hard to charge customers more, and those that work hard to charge customers less. Both approaches can work. We are firmly in the second camp (Bezos, 2011).

In all these cases pricing plays a vital role as enabler or obstacle to firm performance. Practicing managers need guidance on which organizational levers to activate in order to increase the effectiveness of the pricing programs at their firms. Our research sheds light on this question. We survey 748 managers involved in managing pricing activities for their firms – working, on average, for large, US-based industrial companies – to understand which organizational factors influence the effectiveness of pricing programs. We find that the following four key competencies differentiate high performing from low performing companies:

1. organizational confidence;
2. pricing capabilities;
3. organizational change capacity; and
4. championing behaviors by top management.

Our research also identifies a set of specific activities that are linked with superior firm performance. These activities are: activities directed at the improvement of pricing effectiveness (e.g. trainings, pricing tools; pricing performance reviews); improvements in product differentiation and product quality (e.g. through innovation and research aimed at identifying and creating customer value), increased sense of organizational confidence (e.g. optimism, resilience, ''can do''-attitude), improved support of top management, improved ability to stick to list prices and minimization of discounting behaviors and, finally, enhanced cultural adaptability to respond to changing market conditions.Contrary to expectations, this research finds that organizational structure and the degree of centralization of pricing programs have no effect on firm performance.

About the research

We design a cross-sectional self-administered survey that was sent electronically to the 18,000 worldwide members and prospects of the Professional Pricing Society (PPS) We develop our survey instrument based on prior qualitative research which suggested that firm performance is driven by the following five factors (''5 C-model''): pricing capabilities, organizational change capacity, championing behaviors by top management, centralization of pricing programs and, finally, organizational confidence. The surveys items are borrowed and adapted from surveys conducted by past researchers. In our model we included two moderators (relative product advantage and competitive intensity) and measured the degree of pricing formalization and the pricing orientation of firms (cost, competition or customer value-based pricing). We finally add the usual control variables (respondent function, firm industry, region, firm size, location of respondent and of company headquarters, reporting relationship of respondent) to identify potential differences among respondent characteristics.

Descriptive statistics

We obtain 748 complete questionnaires for a response rate of 4.2 percent. Respondents are predominantly from pricing (57 percent) and marketing or sales functions (24 percent); manufacturing companies (55 percent) account for the largest share of respondents; most companies are publicly traded (58 percent); most respondents are from large companies with more than 10 000 employees (44 percent) or from companies with 1000 to 10,000 employees (31 percent); company headquarters are predominantly in North America (68 percent) or Europe (24 percent). The typical respondent in our survey is thus a pricing manager working for a large, US-based, publicly traded manufacturing company.

Championing behavior

We adapt Howell and Shea's (2005) survey items to assess the extent to which top management demonstrates specific behaviors to lead and support organizational implementation of pricing programs. The scale items receiving the highest average ratings are (rating in brackets):

- Expresses strong conviction about the importance of pricing (rating of 5.21 out of 7).
- Gets key decision makers involved in the pricing process (rating of 5.16 out of 7).
- Expresses confidence in what pricing can do (rating of 5.10 out of 7).
- Gets pricing problems into the hands of those who can solve them (rating of 5.05).

These ratings indicate the following: the involvement of top management in pricing is concentrated primarily in expressing the conviction about the importance of pricing, in getting key decision makers involved in the pricing process, in expressing confidence in what pricing can do and, finally, in getting pricing problems in the hands of the most competent personnel. To a much lesser degree top management is seen as ''acting as a champion of pricing'' (rating of 4.7 out of 7).

Pricing capabilities

Pricing capabilities include three critical dimensions:

1. The customer perspective – we measure, for example, the ability of companies to quantify customer value and customer willingness to pay.

2. The competitor perspective – we measure, for example, the ability to react to monitor competitive price levels and to react to changing conditions in the competitive environment.

3. The company perspective – we measure, for example, the ability to stick to list prices, to minimize discounts and the existence of firm-specific, proprietary pricing processes.

The average responses to our 12 items all fall between 3.98 and 4.73 indicating that, on average, pricing capabilities are only weakly developed within organizations. The survey items receiving the highest scores are:

- Doing an effective job of pricing products/services (rating of 4.73 out of 7).
- Conducting value-in-use analysis or Total Cost of Ownership (4.63 out of 7).
- Measuring and quantifying differential economic value versus competition (rating of 4.59 out of 7).
- Monitoring competitors prices and price changes (rating of 4.44 out of 7).

Our survey thus indicates that most organizations have an urgent need to further improve pricing capabilities along all critical dimensions of pricing, namely, along the customer perspective by improving their understanding of customer willingness to pay and customer value; the competitor perspective by improving their ability to react to changing conditions in the competitive environment, and the company perspective by improving the ability to stick to list prices, to minimize discounts and to design firm-specific, proprietary pricing processes.

Center-led pricing management

The center-led management design is a combination of some elements of both centralized and decentralized approaches to pricing. This concept was first developed in the field of supply chain and sourcing and we borrow it to link it to the field of pricing. Our objective is to measure the extent to which a centralized organizational unit leads and influences pricing activities. A total of 73 percent of respondents declare having a central pricing team supporting pricing activities across their organizations. The primary functions of this centralized pricing team are (average item rating in brackets):

- Provides knowledge with the overall pricing process (rating of 5.65 out of 7).
- Assists in the design and implementation of pricing tools (rating of 5.61 out of 7).
- Provides top management with pricing report and trends (rating of 5.28 out of 7).
- Assists decision makers with the price setting process as part of the formal product development process (rating of 5.22 out of 7).

It is interesting to note that the item ''conducts pricing training with divisional decision makers and top executives'' only obtains a rating of 3.42 out of 7, indicating that these teams do not frequently conduct training specific to pricing.

Organizational confidence

For this study, we adopt the definition of organizational confidence proposed by Bohn:

> Organizational efficacy is a generative capacity within an organization to cope effectively with the demands, challenges, stressors and opportunities it encounters within the business environment. It exists as an aggregated judgment of an organization's individual members about their (1) sense of collective capacities, (2) sense of mission or purpose, and (3) a sense of resilience. In its most basic form, organizational efficacy is a sense of ''can do'' (Bohn, 2001, 2002).

The concept of collective confidence was never formally linked to pricing and we want to explore its various dimensions to measure their potential impact of pricing activities. The following items receive comparatively high rankings:

- We believe in the value of our products/services (rating of 5.75 out of 7).
- We are confident about our future (rating of 5.47 out of 7).

- People here have a sense of purpose to accomplish something (rating of 5.43 out of 7).
- We have a strong vision of the future (rating of 5.23 out of 7).
- We can take on any challenge (rating of 5.16 out of 7).

Conviction of the value of own products and services, confidence about the future, a sense of purpose, a vision of the future and the self-confidence of being able to take on any challenge are the most highly rated items in our organizational confidence construct.

Organizational change capacity

Organizational change capacity allows ''an enterprise to adapt more quickly and effectively than its competition to changing situations'' (Judge and Douglas, 2009, p. 635). Our list of items to be measured includes aspects related to culture and leadership behaviors associated with change. The following items receive the highest ratings:

- In this organization, our culture values innovation (rating of 5.37 out of 7).
- In this organization, business unit leaders protect the core values while encouraging change (rating of 5.14 out of 7).
- In this organization, business unit leaders show courage in their support for change initiative (rating of 5.06 out of 7).
- In this organization, business unit leaders consistently articulate an inspiring vision of the future (rating of 5.01 out of 7).

Competitive intensity and product advantage

Previous pricing studies showed that both competitive intensity and product advantage influenced the relationship between a firm's pricing approach and firm performance (Ingenbleek *et al.*, 2003). Our intention is to also evaluate this degree of influence and to uncover potential connections to pricing activities. Respondents all face a strong level of pricing competition as indicated by the item rating of 5.63 out of 7 (''intense price competition''). All three items related to competition are above a rating of 5 out 7. Despite this level of competition, respondents declare that their ''products/services offer higher quality than competing ones'' (rating of 5.39 out of 7) and that their products/services ''solve problems that customers have with competing ones'' (rating of 5.14 out of 7). These ratings indicate a fair level of perceived product/service advantage in the market even though competition is intense.

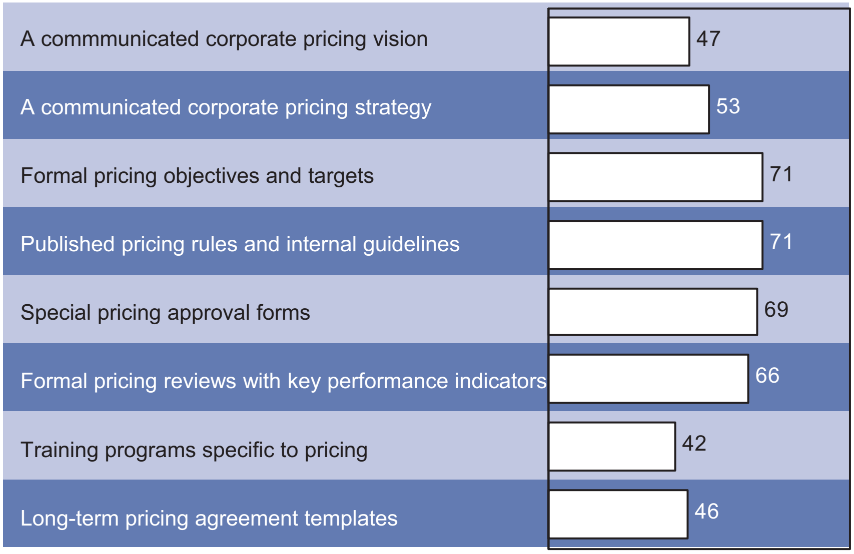
Pricing orientation

Consistent with previous classification of pricing orientation proposed by Ingenbleek *et al.* (2003) we aim at measuring the extent to which our respondents adopted value-based pricing, competition-based pricing, or cost-based pricing as their primary pricing orientation. Results show that, on average, competition-based pricing dominates (36 percent), followed by cost-based pricing (34 percent) and, lastly, customer value-based pricing (30 percent). We also measure pricing orientation through a number of questions: We ask respondents to list factors taken into account when setting prices in their firms. For customer value-based pricing, respondents use: ''advantages of the product/service compared to competitor's product/service'' (rating of 5.20 out of 7) and ''customer willingness to pay for their unique product/service'' (rating of 5.03 out 7). For competition-based pricing, respondents use: ''degree of competition in the market'' (rating of 5.56 out of 7) and ''price of competitor's product/service'' (rating of 5.62 out of 7). Finally for cost-based pricing, ''target margin guidelines'' (rating of 5.45 out of 7) and ''variable costs of product/service'' (rating of 4.86) are most common.

Pricing process formalization

The formalization of pricing process is measured by asking respondents what formal pricing activities and sub-processes are currently in place in their companies. Figure 1 reveals that only 42 percent of companies have a clearly formulated pricing vision and that only 53

Figure 1 The formalization of pricing



Note: Pricing formalization (% of affirmative answers)

percent of companies have a communicated corporate pricing strategy. Seventy-one percent of companies have formal pricing objectives and targets, but only 66 percent of companies practice formal pricing reviews with key performance indicators. Only 42 percent of respondents have received specific training in pricing.

In sum, this research finds that few companies have translated their overall company vision, mission and strategy into specific, pricing-related guidelines, objectives and performance reviews.

Firm performance

Our outcome variable is firm performance as perceived by respondents and measured using past studies in the field of strategic management (Morgan *et al.*, 2009). Our definition of performance consists of the following eight items:

1. acquisition of new customers;
2. increase of sales to current customers;
3. growth in total sales revenues;
4. absolute price levels;
5. pricing power in the market;
6. business unit profitability;
7. return on sales (ROS); and
8. return on investment (ROI).

Firm performance varies widely in our sample, ranging from 3.4 on some items in the bottom quartile to 6.3 on the seven-item scale on other items in the top quartile.

The activities driving superior performance

The objective of our research is to identify a set of specific activities and a set of competencies associated with above-average firm performance. We conduct a linear regression on all survey items to identify these specific activities and use R square decomposition on our main constructs to identify those factors that explain the largest variation in firm performance.

The survey items influencing the most relative firm performance are the following six items (see Figure 2):

1. pricing effectiveness;
2. product quality;
3. confidence about the future;
4. top management support;
5. ability to stick to list prices and to minimize discounts; and
6. cultural adaptability.

The first core finding of this research is thus that there exists a set of key activities which companies can and should implement in order to increase firm performance through pricing. These activities are: activities directed at the improvement of pricing effectiveness (e.g. training, pricing tools; pricing performance reviews), improvements in product differentiation and product quality (e.g. through innovation and research aimed at identifying and creating customer value), increased sense of organizational confidence (e.g. optimism, resilience, ''can do''-attitude), improved support of top management, improved ability to stick to list prices and minimization of discounting behaviors and, finally, enhanced cultural adaptability to respond to changing market conditions. Managers of all levels are thus well advised to undertake actions in these six domains in order to improve firm performance.

The competencies driving superior performance

The effect of competencies on firm profitability

Our second key research question relates to the set of competencies which distinguishes firms with above average profitability and growth from firms which exhibit below average profitability and growth. In statistical terms, we use the R square decomposition method to identify the survey items that account for the largest variation in firm performance. This

Figure 2 Activities driving superior performance

Note: Step-wise regression to identify specific activities process leads to the identification of four competencies which explain why some firms outperform others and why other firms lag behind in terms of profitability and growth. Ranked by order of importance these competencies are (see Figure 3):

1. Pricing capabilities (explained variation in firm performance: 34 percent).
2. Organizational confidence (explained variation in firm performance: 28 percent).
3. Organizational change capacity (explained variation in firm performance in firm performance: 11 percent).
4. Championing behaviours by top management (explained variation in firm performance in firm performance: 10 percent).

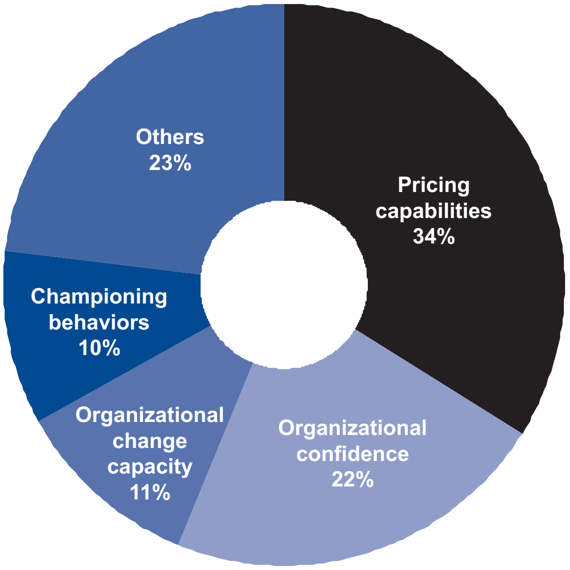
Contrary to expectations we do not find that firm structure (i.e. center-led pricing management) explains variation in firm performance. Variations in firm performance thus correlate highly with, firstly, variations in pricing capabilities and with, secondly, variations in organizational confidence.

Our research thus answers the critical question on the specific competencies required to drive organizational performance via pricing. Our research shows that four competencies explain why some firms achieve higher performance via pricing. These four competencies are: pricing capabilities, organizational confidence, organizational change capacity and, finally, top management championing behavior.

The effect of competencies on firm performance

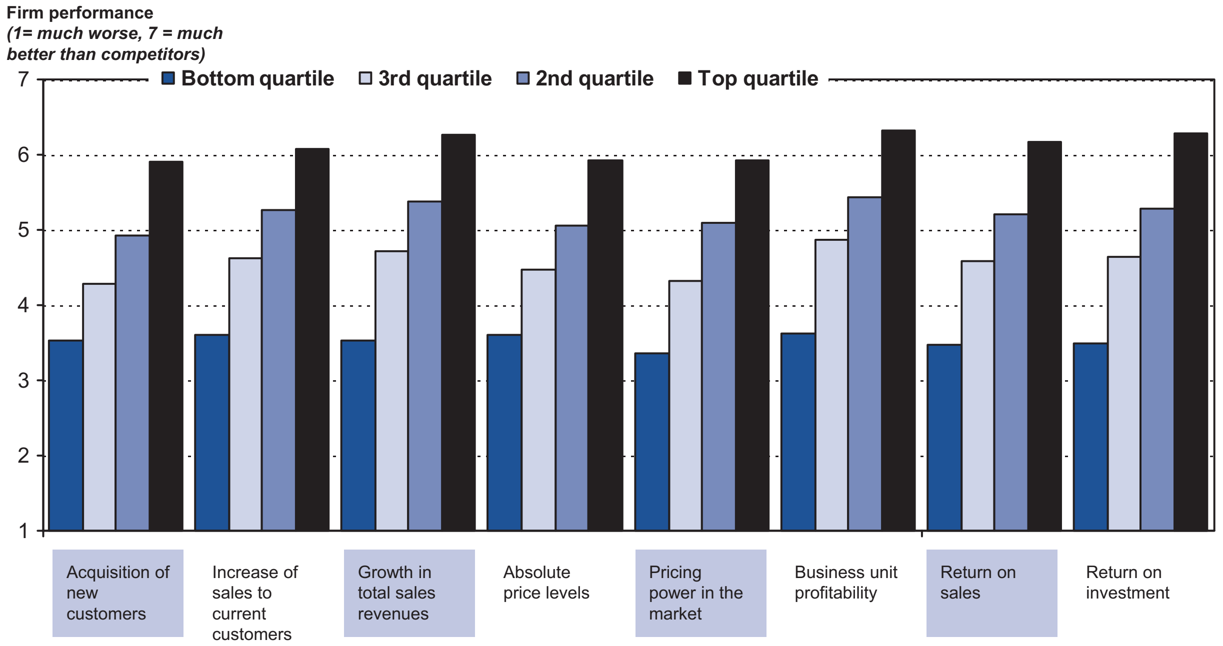
We next analyse how improvements in any of the competencies affect firm performance: To do so we first divide the sample of 748 respondents in four quartiles by firm performance and highlight firm performance on the eight items which make up the performance scale we use in this study: acquisition of new customers, increase of sales to current customers, growth in total sales revenues, absolute price levels, pricing power in the market, business unit profitability, return on sales (ROS), and, finally, return on investment (ROI). Figure 4 illustrates stark contrasts in firm performance between the bottom quartile and the top quartile in our sample.

Figure 3 Competencies driving superior performance



Note: *R* square decomposition to identify firm competencies

Figure 4 Competencies and firm performance



Note: Firm performance on key items by quartile

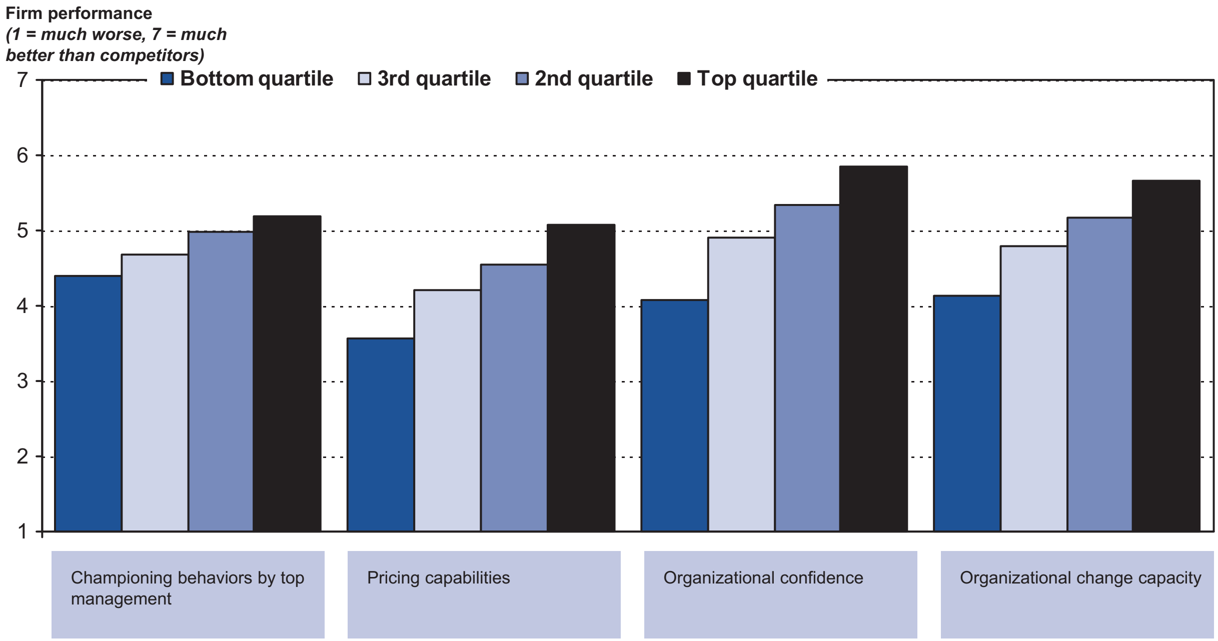
Figure 5 highlights how companies in each performance quartile score on the key competencies which we identify as key performance drivers: pricing capabilities, championing behavior by top management, organizational confidence and organizational change capacity. This table illustrates that companies in the top quartile by performance have substantially more developed competencies, in particular substantially higher organizational confidence and substantially higher pricing capabilities than companies in the bottom quartile by performance.

All four competencies drive firm performance *vis-à-vis* competitors. This table particularly highlights how pricing capabilities and organizational confidence influence firm performance: companies with highly developed pricing capabilities and companies with a high degree of confidence substantially outperform companies with weak pricing capabilities and low confidence. The impact of championing behavior and of organizational change capacity on firm performance is positive, but lower.

We next analyse how a given increase of each of the four competencies – i.e. 1 point increase on a seven-point scale – affects firm performance. A 1 point increase on a seven-point scale in organizational confidence increases firm performance by, on average, 0.36 points, whereas a 1 point increase in pricing capabilities increases firm performance by, on average, 0.25 points. Figure 6 illustrates these relationships.

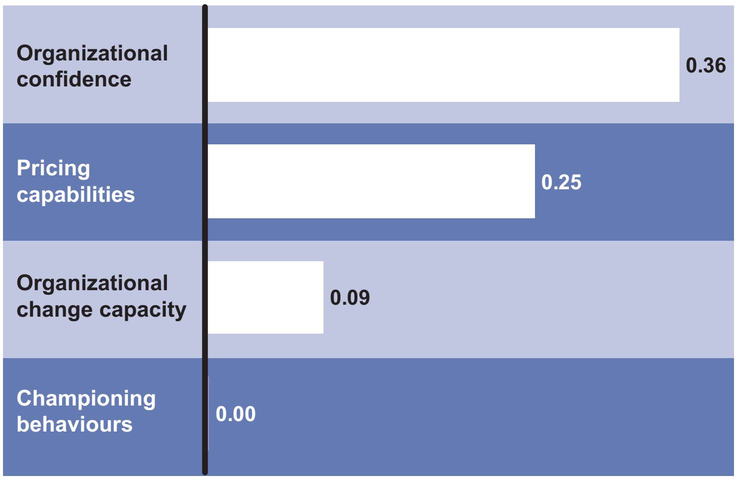
A numerical example can serve to illustrate the impact of competencies on firm performance: Taking return on sales as example (one of the eight items in our performance scale), we make the assumption that objective firm performance is −15 percent in the bottom quartile and +15 percent return on sales in the top quartile. We thus can convert the perceived performance scale into objective performance. Since, as Figure 4 shows, the item ''return on sales'' is at 3.47 (bottom quartile) and 6.17 (top quartile) on the seven-point scale, each 0.1 improvement in subjective performance on the seven-point scale corresponds to a 1.1 percent improvement in objective performance in the numerical example. A 1 point improvement in organizational confidence will thus lead, on average, to a 4.0 percent improvement in return on sales.

Figure 5 Competencies and firm performance



Note: Competencies and firm performance by quartile

Figure 6 Improvements in competencies affect performance



Note: 1 point improvement in competencies leads to the following improvement in firm performance on 7 point scale

Today, more than in the past, pricing managers and senior executives are asked to justify investments into the pricing function. Similarly, the pricing function is asked not only to improve short-term firm performance but also to substantiate and to document the effect of own activities on the bottom line. The relationships that our research and the numerical example highlight are thus fruitful starting points which may allow to link specific activities (i.e. investments and efforts to increase pricing capabilities or organizational confidence) with results (e.g. improvements in return on sales). These data may then allow quantifying the pricing ROI, an area where substantially more research is warranted.

Implications

For practicing executives these findings have very important implications: our research suggests that the main competencies for driving firm performance via pricing are pricing capabilities and organizational confidence: variations in firm performance correlate highly with variations in pricing capabilities and organizational confidence (Figure 3); improvements in organizational confidence and in pricing capabilities lead to the biggest improvements in firm performance (Figure 6).

The following quote from the CEO of General Electric, Jeff Immelt, highlights the role of pricing capabilities. He states:

> A good example is what we're doing to create discipline around pricing. . . .. . . When it comes to the prices we pay, we study them, we map them, we work them. But with the prices we charge, we're too sloppy'' (Stewart, 2006, p. 62).

This quote also highlights the role of championing behaviors by top management. Jeff Immelt has appointed a Chief Pricing Officer responsible, among other tasks, for analyzing and developing pricing capabilitities across business units and countries. Our research clearly shows the impact of pricing capabilities on firm performance.

This research highlights the role of organizational confidence. To the best of our knowledge we are not aware of a single quantitative study which has explored the relationship between confidence – an attitude – and firm performance – tangible results. Our research shows that, holding other variables constant, a given increase in organizational confidence has a larger impact on firm performance than any other variable in our survey. Organizational confidence encompasses the following items: the belief in own abilities to take on any challenge, a sense of purpose, a vision for the future, the confidence in the future and belief in future accomplishments, the conviction that own products/services deliver value, the courage to withstand customer price objections, the courage to implement price changes in the market and the certainty to work well together as a team.

Sales personnel, pricing managers, marketing managers, and senior executives are thus well advised to plan and implement measures aimed at increasing confidence. These measures should include: developing the belief of key personnel to take on any challenge, developing a sense of purpose and a vision for the future in key decision makers, developing positive connotations, even a sense of excitement, about the future of the organization and in future individual and organizational accomplishments, instilling the conviction that the products of the organization truly deliver outstanding customer value, training key sales and marketing personnel to withstand customer price objections and to implement price changes *vis-à-vis* customers and, finally, developing organizational abilities to work well together across countries, product lines and organizational layers.

In addition to pricing capabilities and organizational confidence, two further competencies are important, although not as important as these two: organizational change capacity and championing behaviors by top management. Our data thus show that organizations need to develop their capabilities to adjust to changing environmental conditions; our research also shows that championing behaviors by top management – enthusiastically promoting the pricing function, facilitating the implementation of pricing, getting key personnel involved in pricing, expressing confidence in the ability of pricing to deliver results and acting as champion of pricing – are important.

We can now return to our initial examples of the two companies (JC Penney and Netflix) that have witnessed sharp reductions in revenues and stock prices largely as a result of ineffective pricing programs. To these and other companies the results of our research will be useful: Our research with 748 respondents in mostly large, US-based industrial companies reveals that firm performance depends on the development of four key competencies: firstly, organizational confidence (i.e. a ''can do'' attitude and a belief in own abilities), secondly, pricing capabilities, thirdly organizational change capacity and, finally, championing behaviors by top management. This study thus shows that these and other companies can substantially increase the effectiveness of their pricing programs and firm performance by increasing organizational confidence, by developing and deploying pricing capabilities, by improving organizational change capacity and, finally, by championing behaviors by top management.

Keywords:
Pricing,
Competences,
Business performance,
Business improvement,
Performance improvement,
Organizational capabilities

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